

OBSERVATIONS OF THE SUN,  
AND  
ACTUAL MEASUREMENTS ON THE COAST OF IRELAND,  
ON WHICH THE SURVEY OF IT WAS GROUNDED.

*Meridian Zenith Distances of the Sun's upper Limb.*

|                    |                                                                                                             | Deg. | Min. | Latitude. |
|--------------------|-------------------------------------------------------------------------------------------------------------|------|------|-----------|
| 1758, July 25th.   | At Copland light-house, in Crofs Island, near Belfast, the meridian zenith distance of the ☉ upper limb was | 34   | 43   | 54° 40'   |
| 1762, May 28th.    | Near Howth light-house, at Dublin Bay                                                                       | 31   | 32   | 53° 19'   |
| June 15th.         | About one mile N. W. from Wicklow Head                                                                      | 29   | 17   | 52° 55'   |
| June 21st.         | Kilmichael Point in Wicklow                                                                                 | 28   | 56   | 52° 40'   |
| July 2d.           | At Greenore Point in Wexford                                                                                | 28   | 51   | 52° 12'   |
| August 14th.       | At Carlingford in Leuwth county                                                                             | 39   | 23   | 54° 1'    |
| 1763, August 12th. | Near the light-house, on the Old Head of Kingsale                                                           | 36   | 16   | 51° 35'   |
| September 13th.    | On the top of the hill, near the N. end of Cape-clere Island                                                | 47   | 15   | 51° 21'   |
| September 14th.    | At the top of Mount Gabriel in Cork                                                                         | 47   | 45   | 51° 28'   |
| 1765, July 8th.    | At the south side of Ventry Bay                                                                             | 29   | 15   | 52° 3'    |
| 1766, July 11th.   | At Ochal, in South Arran Island                                                                             | 30   | 42½  | 53° 5½'   |
| July 31st.         | At the Pool, in Roundstone Bay                                                                              | 34   | 51   | 53° 22'   |
| 1767, August 7th.  | At Kilerera, near Killery Harbour, in Mayo                                                                  | 36   | 51½  | 53° 35½'  |
| 1768, May 24th.    | At Balmullet, in Black-fod Bay                                                                              | 32   | 59½  | 54° 10½'  |
| September 9th.     | At the head of Tillen Harbour                                                                               | 49   | 17½  | 54° 37½'  |
| October 14th.      | At the S. end of Inishmacadurn Island in the Rosses                                                         | 63   | 5½   | 54° 56½'  |

These Observations were made with Bird's twelve-inch quadrant; which, for the most part, was adjusted immediately before, within one minute of a degree.

*Measurements on the Coast of IRELAND.*

Measured in Derry Loch, on the sand along the south side of Magiligan's Point, from the extremity (nearly) of that Point eastward to Knocktemon Hill, six miles three quarters and thirty-seven yards.

Measured along the sand, on the south side of Belfast Loch, from the Point of Cultrae westward, to the gate of an inclosure, near Belfast Bridge, 4½ miles and three hundred seventy-six yards.

Measured on the North Bull sand in Dublin Bay, from the Point of Clontarf E. 1½° S. to the edge of Sutton's Gut, 3½ miles, and one hundred twenty yards.

Measured along the sand on the W. side of the entry of Waterford harbour, from Fornaught Bay, at Credan Head, to a gravel bank along the shore, bearing N. 26° E. four miles, wanting twenty-one yards: and from thence to the perch, near Passage, one hundred and fifty yards; these two lines forming an angle of 105° 50'.

Measured on the sand of Tramore Bay, near Waterford, from the channel of Rinesbark, to the town of Tramore 2½ miles, wanting eighty-four yards.

Measured within the harbour of Cork, along the sand on the W. side of Fety Island, 1128 yards, in two lines, forming an angle of 153° 20' the first line extending N. 43° W.

Measured on the sand, along the S. side of Birterach Island, near Kilalla, in Mayo, from the S. W. end of Birterach, continued S. 34½° E. two miles, and 196 yards.

These measurements were made with a substantial iron chain, fifty feet long; the straight line marked on the sand, by upright poles and small cords stretched between them, and the number of chains counted by pins set at the end of each chain.

The fundamental angles, at each extremity of the above base-lines, for ascertaining the positions of distant hills, or other conspicuous objects, and the angles at these hills or objects, for determining the distances of remarkable points, promontories, or rocks on the coast, were taken with a Theodolite: the distances of other intervening stations along the shore, and of rocks and shoals off it, were determined by the magnetic intersections of two or more of these points, promontories, hills, or other remote objects.

The variation of the Magnetic Needle was found by the stars, by setting up a light in the direction of • in Urfa Major, when it and the Pole Star were on the same vertical circle: or when • was at its greatest azimuth, and a proper allowance made for its distance from the meridian at that time.

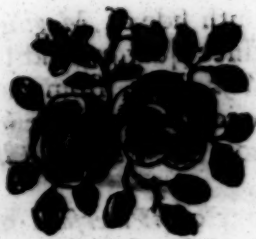


*How to accommodate any future Variation of the Compass to the following Descriptions, and their respective Charts.*

If the variation of the compass shall, at any time hereafter, be *westward of the variation in a chart*; write the difference of the two variations, and a W. on the margin of the Chart, and of its description, to be reserved for use. Then, North in the Chart, being so much eastward of North by the compass; and South in the Chart, so much westward of South by the compass; all bearings and courses in that Chart, and in its description, that are on the *west side of the magnetic meridian*, are to be reckoned, or steered by the compass, as if they were *nearer to the North by that difference*: and all bearings and courses on the *east side of the magnetic meridian* in the Chart, or its description, are to be reckoned, or steered by the compass, as if they were *farther from the North by that difference*.

But if the variation of the compass, any time hereafter, shall be *eastward of the variation in a Chart*; write the difference, and an E. on the margin of that Chart, and of its description, to remain there for use. Then, North in the Chart being so much westward of North by the compass; and South in the Chart so much eastward of South by the compass; all the bearings and courses in that Chart, and in its description, that are on the *East side of the magnetic meridian*, must be reckoned, and steered by the compass, as if they were *nearer to the North*, by the difference of the two variations: and all bearings and courses on the *West side of the meridian* in the Chart, or description, as if they were *farther from the North* by that difference.

*Note.* The names of the places in *Ireland* are, for the most part, spelled in the Charts and descriptions, agreeable to the common pronunciation: it may not therefore be altogether unnecessary to observe, to an *English* reader, that, in order to pronounce them intelligibly, (*ch*) and (*gh*) must always have a guttural sound; that *g* is pronounced hard before *e* and *i*, as well as before *a*, *o*, and *u*; that *a* is pronounced open, as in (*war*), or in (*add*); and *i* sharp, as in (*image*) or in (*fin*), with very few exceptions.





NAUTICAL DESCRIPTIONS  
OF THE  
COASTS OF IRELAND,

ADAPTED TO  
THE SEVERAL CHARTS IN THE MARITIME SURVEY OF IRELAND.

CONTAINING  
A PARTICULAR ACCOUNT

OF THE  
TIDES, ROCKS, SHOALS, CHANNELS, ANCHORING-PLACES, AND HARBOURS,  
ALONG THESE COASTS;

*WITH SUITABLE SAILING-DIRECTIONS INTERSPERSED.*

TO WHICH IS PREFIXED,  
THE PRINCIPAL OBSERVATIONS AND MEASUREMENTS  
*ON WHICH THE SURVEY WAS GROUNDED.*

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BY MURDOCH MACKENZIE, SEN.

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# NAUTICAL DESCRIPTIONS

## OF THE

# SOUTH COAST OF IRELAND,

FROM WEXFORD TO DURSEY ISLAND.

*A Description of the Tides, Rocks, Shoals, Sand-Banks, Channels, Anchoring-Places, and Harbours, between WEXFORD and WATERFORD.*

### CHART II.

*Tides between WEXFORD and WATERFORD.*

TIDES.

ON the full and change days of the moon, it is high water in the harbour of *Wexford* at seven o'clock; High-water at *Wexford*, but two or three miles from that coast, the stream of ebb does not begin till an hour and a half later. On the shore of the *Saltee* islands, it is high water at four and a half; and in *Waterford* harbour at five and a half; but the stream of ebb along that coast does not begin till three hours later.

Spring-tides on the E. coast of *Wexford* rise only four feet perpendicular, and neap-tides three. At the *Saltees*, and in *Waterford* harbour, ordinary spring-tides rise ten feet, and neap-tides six.

The principal stream of flood, along this part of the coast, sets in from the S. W. and runs along the S. side of the *Saltees* and *Tusker* rock, and there turns northward through the Irish channel: that part of the stream, which runs nearer the coast, divides near the middle of the great *Saltee* island; one branch running along the S. end of it, and the other along the N. end, between the two *Saltees*; and, passing *Carnfore Point*, turns northward between it and *Tusker*. Ebb tide takes the contrary direction.

Along the E. side of *Hook Point*, at the mouth of *Waterford*, the stream, from half flood on the shore to half ebb, runs northward; and from half ebb to half flood, it runs southward. On the W. side of *Hook Point*, within a cable's length of the shore, it runs S. from half flood to half ebb; and N. from half ebb to half flood.

Half between the E. coast of *Wexford* and *Tusker Rock*, the stream, when strongest, runs about two miles an hour; on the E. and N. sides of *Tusker*, spring-tides, when strongest, run about four miles an hour, and neap-tides one and a half.

Between the *Saltees* and *Waterford* harbour, the stream, when strongest, runs about one mile an hour; near the *Saltees* it runs about two miles an hour; and at the *Point of Hook* it runs three miles an hour; and makes a ripple, or breaking sea there, from several different streams meeting at that point.

*Rocks and Shoals between WEXFORD and WATERFORD.*

ROCKS and SHOALS.

The *Dogger Sand* lies near the entry of *Wexford* harbour, is about  $1\frac{1}{2}$  mile long from N. to S. Part of the N. end of it is always dry, except when the surf washes over it; the rest dries gradually. The dry part is apt to shift with gales of wind. To avoid the N. end of this sand, and the spit off the *Raven Point*, sailing into *Wexford* harbour, keep a cable's length from the dry part of the *Dogger*, or keep the houses of *Fort W.* by S. or the extremity of the *Point of Fort W.*  $\frac{1}{4}$  S. when it will be in a line with the house of *Drynach*, which may be seen between two small bushes of wood. The anchorage is on the W. side of the *Point of Fort*, a cable's length or two from the shore.

*Holden's Bed* lies off *Rosflare Bay*, about two miles NE. of *Greenore Point*. It is about three miles long from S. W. to N. E. and near a mile broad: the least water on it is seven feet, which is near the S. W. end; the rest of it has two, and two and half fathoms. To sail along the S. W. end of it; keep the southmost of the two highest mountains visible N. W. or the northmost of them N. W. by N. These mountains are in the county of *Carlow*. To sail between it and the *New Grounds*, keep *Torra Hill* a little without *Cabore Point*.

The *New Grounds* is a sandy shoal four miles long, from S. S. W. to N. N. E. and a quarter of a mile broad; on it the least water is ten feet, which is near the middle. The S. end bears E. about five miles from *Greenore Point*; and  $5\frac{1}{2}$  miles N.  $\frac{1}{4}$  E. from *Tusker*: at the S. end of it the *White House* of *Rosflare* is in a line with the S. end of *Fort Mountain*, near the southmost *Humock*. At the N. end of it, *Greenore Point* bears S. W. by W. and the *Point of Fort* N. W. by W.

The *Splough* is a rocky shoal, about one mile S. E. from *Greenore Point*; the least water on it is three feet, and near the N. end.

The *Bailies* is a long narrow ridge of sand, about half way between the *Main* and *Tusker*, on which the least water is three fathoms; it may always be distinguished by a gray ripple, or by a rough breaking sea on it, except about slack water in a calm. The N. end of it reaches near to the *Splough*; the ripple on the S. end bears W. from *Tusker*, and about E. by S. from *Carnfore Point*: to avoid this shoal on the E. side, keep nearer to *Tusker* than to the *Wexford* side.

There are two small rocks near *Greenore Point*: the northmost of which is a cable's length from the shore; the southmost is about two cables length.

*St. Mary's Rock* lies off *St. Mary's Bay*, and dries about half ebb. It is about three quarters of a mile S. by W. from a remarkable rock always above water.



## From WEXFORD to WATERFORD.

## Tusker.

*Tusker* is a large remarkable rock, the height of a house above the water. It lies E. of the S. end of the *Great Saltee Island*, and  $2\frac{1}{2}$  leagues E.  $\frac{1}{2}$  S. of *Carnfore Point*. Ships from the westward bound up to the *Irish* channel, should endeavour to see this rock before they set their course northward.

## Shoal near Tusker.

About half a mile S. W. from *Tusker*, there is a small rocky shoal, on which the least water is five feet. Keep a mile from the S. W. side of *Tusker*, or within half a mile of it, and this shoal will be avoided.

## Black Rock.

*Black Rock* lies on the S. coast of *Wexford*, about four miles W. by S. of *Carnfore Point*, and is always above water.

## The Barrels.

The *Barrels* are two small rocks close together, that lie about three quarters of a mile E. S. E. from *Black Rock*, and dry at half ebb. To avoid them on the S. side, coming from the eastward, keep *Greenore Point* in sight by *Carnfore Point* till the *Black Rock* bears N. W. or on *Ballabeli Castle*, then sail W. S. W. past the rocks that lie southward of the *Great Saltee*. To avoid the *Barrels*, sailing from the westward, keep above a mile southward of the *Black Rock*.

## Coning-more.

*Coning-more* is a rock always above water, that lies  $1\frac{1}{2}$  mile southward of the *Great Saltee*.

## Coning-beg.

*Coning-beg* dries at half ebb, and lies above a mile S. W. by S. from *Coning-more*. You are a little eastward of *Coning-beg* when *Coning-more* bears in the middle of the sound between the two *Saltee* islands: you are a little westward of it when that sound is quite shut in.

## Brandy Rocks.

*Brandy-Rocks*, are two small rocks that lie about two miles E. by N. from *Coning-more*, and dry at half ebb. To avoid them on the E. end, keep the castle of *Ballitaig* out by the N. end of the *Little Saltee*: to avoid them on the W. side, keep *Ballitaig Castle* just out, or a little shut in by the S. end of the *Little Saltee*; or the N. end of the *Great Saltee* N. To avoid them on the S. side, keep *Coning-more Rock* W. or W.  $\frac{1}{2}$  N.

## St. Patrick's Bridge.

*St. Patrick's Bridge* is a narrow ridge always under water, extending in a curve from the *Little Saltee* northward to the main. It is composed of large stones, like paving-stones; the depth on it, at low water, is from seven to ten feet.

## Shoal near the Little Saltee.

About half a mile northward from the S. W. point of the *Little Saltee*, there is a small blind rock, on which the least water is three feet.

## Rock that dries near Little Saltee.

About a cable's length S. W. of that S. W. point of the *Little Saltee*, there is a small rock that dries about half ebb.

## Shoals on the N. side of Great Saltee.

On the N. E. end of the *Great Saltee*, there are two rocky shoals extending from the shore northwards, about a quarter of a mile; on these the least water is six feet. Between these two shoals vessels may stop on clean ground, in moderate weather. To avoid these shoals in sailing between the *Saltees*, keep somewhat nearer the little island than the great one.

## Shoal off Fethard.

Off the entry to *Fethard Creek*, about half a mile eastward, there is a rocky shoal, on which the least water is four feet. A ledge extends from *Ingard Point*, near half way to this shoal.

## Bridge of Bracæn.

The *Bridge of Bracæn* is a shoal always under water, that extends about a quarter of a mile S. E. from the point next N. of *Slade* harbour; the least water on it is five feet: to avoid it, keep any part of the *Mountain of Fort* above *Wexford*, without *Baganbén Head*.

## STOPPING-PLACES.

## Stopping-Places between WEXFORD and WATERFORD.

## Roslare Bay.

In moderate weather, especially with westerly winds, a vessel may stop on the S. side of the *Bay of Roslare*, on  $2\frac{1}{2}$  or  $3\frac{1}{2}$  fathoms water, about a mile from the shore. Here the ground is all clean, and the shelter good against W. and S. W. winds. To fail to it from the S. or W. keep a little nearer to *Tusker* than to the main, and sail northward till the *White House of Roslare* bears any where on *Fort Mountain*, except on the southmost *Hummock*; then stand in by that mark, between *Holden's Bed* and *Greenore Point*, for the anchorage, till you find  $3\frac{1}{2}$  or  $2\frac{1}{2}$  fathoms water.

## Little Saltee island.

With westerly winds, and moderate weather, a vessel may stop any where along the E. side of the *Little Saltee*, about two cables length from the shore, on five or six fathoms water; the ground is clean, but will not hold in hard gales: therefore, if it is likely to blow, it will be prudent to weigh anchor in time, and stand out to sea, or run for a harbour.

## Great Saltee.

With S. or S. E. winds and moderate, a vessel may stop on the N. side of the *Great Saltee*, between the two shoals that extend northward. The best part is, when the small house, which may be seen there, bears S. by E. or S. S. E. about a cable and half from the shore.

## Mouth of Waterford.

In the mouth of *Waterford* harbour, a vessel may stop any where, either on the E. or W. sides, as may be convenient.

## HARBOURS.

## WEXFORD Harbour.

*Wexford* harbour is capacious, sufficiently sheltered, and the ground all clean; but it is not fit for vessels that draw above nine feet water, because of the shallowness of the entry: with neap-tide, vessels that draw nine feet must have at least four hours flood before they are sure of water enough on the N. side of the *Dogger Sand*; at which time there is water sufficient over all the banks that are never dry, which are in the way to this harbour. But to avoid the rough sea that often makes on these shoals, keep about a mile or two from *Tusker*, either on the E. or W. sides of it, till the *White House of Roslare* bears on the top of the *Mountain of Fort*, which mark will lead between *Holden's Bed* and *Greenore Point*; keep that mark on till the *Point of Greenore* bears S. by E. then steer northward along the *Dogger Sand*, which will be distinguishable by the water rippling or breaking on it, till the houses of *Fort* bear W. by S. or till the *Point of Fort* bears W.  $\frac{1}{2}$  S. and on the *House of Drynach*, which is seen between two bushes of wood; keep either of these marks till you are within a cable's length of the point, then steer for the anchorage westward of the point: anchor when the extremity of it bears E. by N. or E.  $\frac{1}{2}$  N. a cable's length or two from the shore.

## WATERFORD Harbour.

*Waterford* is a spacious and safe harbour, capable of large ships. It has a light-house on the *Point of Hook*, on the E. side of the entry; and, after sun-set, two lights are put up in *Duncannon Fort*, six miles up the harbour: there is also a perch on the point of the sand near *Passage*. There is a narrow ridge of sand about half a mile above *Creden Head*, which stretches quite across the channel; the least water on it, with low spring-tide, is ten feet: at high-water, spring-tide, there is at least twenty feet on it; and at high-water, neap-tide, eighteen feet.

The usual anchorage, for large vessels, is half a mile, or a quarter of a mile above *Passage*, nearest the W. side, on five or six fathoms water. Here spring-tides, when strongest, run about three miles an hour. Smaller vessels ride in less tide, and smoother water, nearest the E. side.



## From WATERFORD to YOUGHAL.

To fall in with *Waterford* harbour, coming from the southward, or eastward; keep *Sleanaman Mountain* (which is a remarkable mountain up the country) N. E.  $\frac{1}{2}$  N. or the *Great Saltee* island S. S. E. till you see *Hook* light-house; which is on the E. point of the entry, and stand no nearer that point than a cable's length or two, to avoid falling into the rough irregular streams of tide there.

To sail to the anchorage at *Passage*; take flood tide, or a brisk leading wind; steer for *Creden Head*, and keep near a cable's length, or half a cable's length from it; from thence steer right on *Duncannon Fort*, and keep about half a cable from it; then steer N. on the church of *Ballibake*, which stands on a hill, till you see the perch near *Passage*, bearing on the town of *Passage*, then steer past the town for the anchorage.

There is very good anchorage two or three miles above *Passage*, in the channel of the river *Suer*, where the stream is much weaker than at *Passage*. In failing to this place, avoid a shallow spit of sand, which extends S. W. from the point at *Butter-milk Castle*, about half over to the opposite side; the least water on this spit is nine feet. Avoid likewise a small bank, which lies on the S. side of *Cbeek Point*, about two cables-lengths from the shore, on which the least water is nine feet. At half tide there will be fourteen feet on it. If it is about low-water, keep the middle between the two points, or rather nearest to *Butter-milk Point*, and you will sail clear of it; or, keep in the rough stream of tide.

Vessels that draw not above ten or eleven feet water, may go up to the town of *Waterford*; where there is two fathoms, the least water, about a ship's length from the quay. In failing to or from the town of *Waterford*, the safest channel is on the N. side of the little island: the other side has deeper water, but the channel is narrow and winding, and subject it to eddy-winds and tides, which render it difficult and hazardous.

## FEATHARD Harbour.

*Feathard* is a small dry harbour, on the N. side of *Ingard Point*, fit for small vessels only. Between the pier-heads there are eight or nine feet water, at high-water spring-tide; and six or seven with neap-tides. There is a rocky ledge, that extends eastward from the extremity of the point about two cables-length: to avoid this ledge on the N. side going in, or out, keep an old castle, which may be seen at the S. end of the trees at the town of *Feathard*, or a small summer-house, which is below these trees, on, or open a sail's-breadth, with the quay-head.

There is a long rocky shoal, that lies above half a mile eastward of *Ingard Point*; the least water on it is five feet, which is on the W. end: a leading mark to it, is the forementioned summer-house and old castle in a line.

## SLADE Harbour.

*Slade* is a small dry harbour, about a mile eastward of *Hook Light House*, fit for small vessels only. Between the quay-heads there are eleven feet at high-water spring-tide, and eight or nine with neap-tide.

## A Description of the Tides, Rocks, Shoals, Channels, Anchoring-places, and Harbours, between WATERFORD and YOUGHAL.

## C H A R T III.

## Tides between WATERFORD and YOUGHAL.

## TIDES.

On the shores between *Waterford* and *Youghal*, it is high-water on full and change days at five; but the stream out off the coast does not turn till three hours later.

Ordinary spring-tides rise eleven feet perpendicular; neap-tides six or seven.

The principal stream of flood sets in from the westward; and within five or six miles of the shore, does not run above one mile an hour, when strongest, except near headlands, or in narrow channels.

## Rocks and Shoals between WATERFORD and YOUGHAL.

## ROCKS and SHOALS.

The only rocks along this part of the coast are in the entry of *Dungarvan Bay*, where there are two always above water; the largest is in the middle of the entry; and one rock always below water, called *The Gainers*, on which the least water, with ordinary spring-tides, is two feet. Part of it is said to dry with extraordinary low tides. It lies about half a mile northward of *Helwick Head*, and is a quarter of a mile long from E. to W. To avoid it on the N. side; keep the castle, which is at the abbey of *Dungarvan*, N. W. by N. or, the abbey on the shoulder, or highest part of a hill, which is about two miles N. W. by N. of *Dungarvan*.

## Stopping-Places off this Coast.

## STOPPING-PLACES.

When the wind is off shore, a vessel may stop a tide in the mouth of *Tramore Bay*, on clean sand, near the middle: or two or three miles eastward of *Helwick Head*. Or on the E. side of *Ardmore Head*, a mile, or half a mile from the shore: or in *Whiting Bay*: or off the mouth of *Youghal* harbour: or on the N. side of *Cable Island*, a quarter of a mile from the island, on five fathoms at low-water.

## RINESHARK Harbour.

## HARBOURS.

Small vessels, with a pilot, may go into this harbour; as there is nine or ten feet in the shallowest of the channel at half tide; but as the channel is narrow, and no perches nor buoys in it, and the danger great if the vessel was to ground on the point of sand at the entrance, no stranger ought to attempt to go in, if he is not necessitated by the violence of weather. In that case, he should endeavour to have four hours flood, and to keep within a cable's-length of the shore on the starboard-hand, notwithstanding the breakers appearing there, till he is near a mile up, when the water will be smoother, and the channel more distinguishable. If a vessel is embayed here in blowing weather, and cannot turn out, the best chance of saving the men's lives is to run ashore any where near the W. side of *Tramore Bay*, rather than attempt the harbour.

DUNGARVAN



## THE SOUTH COAST OF IRELAND.

From CABLE ISLAND to GALLY HEAD.

## DUNGARVAN Harbour.

In *Dungarvan* harbour, vessels that draw not above ten feet water, may have good shelter, and clean sand to ground on: but ships of that draught must go in about high-water with spring-tide. The least water in the channel is three feet. At the quay there is seven feet at high-water neap-tide, and nine with spring-tide; a little from the quay, there are eleven or twelve with spring-tide.

To fall in with *Dungarvan*.

To fall in with *Dungarvan Bay*; keep *Cruach Hill* N. it is the westmost, and most tapering of the *Dungarvan Mountains*.

The Gainers avoided.

In the mouth of this bay there are two rocks always above water; *Carrickapane*, the largest, lies near the middle: the channel is on either side of this rock, but it must have a birth of at least half a cable's-length. There is a ledge which extends from the other rock to the shore of *Ballinacourty*. The *Gainers* shoal is avoided as before directed; or by keeping within two cables-length of *Carrickapane*: or one-third from it, and two-thirds from *Helwick Head*.

Sand-bank near *Ballinacourty*.

There is a ridge of sand that dries with spring-tides only, extending southward along *Ballinacourty Point*, which makes the channel there very narrow: to sail between it and the shore, keep about half a cable's-length from the high-water mark; or keep *Ryland's Turret* N. W. by N. and in a line with the sharpest top of *Knockmoldown Mountain*.

Stopping-Places.

The best part to wait the tide to sail up to the harbour of *Dungarvan* (which should not be before half-flood), is off the house of *Ballinacourty*, about half a cable's-length from the shore; for there the ground holds best.

To sail to the harbour.

To sail up to *Dungarvan* harbour; about half-flood steer for *Ballinacourty Point*; when you are near the house, keep about half a cable from that shore; or keep *Ryland's Turret* on the sharpest top of *Knockmoldown*, till you pass the point; then steer W. by N. till *Ryland's Turret* bears on the top of *Cruach Hill*; then steer N. W. by N. for the *Point of Coneygar*: or keep the old castle at *Dungarvan* quay on the highest top of *Knockmoldown Mountain*, and drop anchor off the middle of the town.

## YOUGHAL Harbour.

Ships that draw twelve feet water, may go into *Youghal*, and ride afloat all times of the tide off the middle of the town. There is a bar, or shallow bank of sand, which shuts up the mouth of the harbour, on which the least water is four feet: it extends above a mile southward from the entry. There is always a rough sea on this bar when the wind is on shore, or against the tide. At high-water neap-tide there are thirteen feet of water on the bar. The shallow begins when *Cable Island* bears S. W.

To fall in with *Youghal*.

To fall in with the bay of *Youghal* from the S. keep *Knockmoldown Mountain* N. by W.

Stopping-Places.

The best parts to wait the tide for going over *Youghal* bar, are on the S. side of the bar, on three or four fathoms: the mouth of the harbour N. or off *Whiting Bay* on five or six fathoms; or on the N. side of *Cable Island* on four or five fathoms, about two cables from the shore.

## A Description of the Tides, Rocks, Shoals, Sand-Banks, Channels, Anchoring-Places, and Harbours, between CABLE ISLAND and GALLY HEAD.

## CHART IV.

## TIDES.

## Tides between CABLE ISLAND and GALLY HEAD.

Time of high-water.

On this part of the coast it is high-water in the bays and harbours on full and change days at  $4\frac{1}{2}$ .

Rise of tide.

Spring-tides rise eleven feet perpendicular; neap-tides six or seven.

Direction of the stream.

Flood sets in from the westward, and ebb from the E.

Velocity.

Within a league of the shore, spring-tides, when strongest, run not above one mile an hour, except near the head-lands westward of *King'sale*, where they run about three miles an hour, when strongest.

## ROCKS and SHOALS.

## Rocks and Shoals along the Coast between CABLE ISLAND and GALLY HEAD.

Rock between the *Ballicutten Islands*.  
The *Smiths*.

In the middle, between the two *Ballicutten Islands*, there is a small rock that dries with low spring-tide only. About a mile W. of *Ballicutten Islands*, there is a small rock, called *The Smiths*, dry at low spring-tide only. It is avoided on the S. side, by keeping half a mile from the shore: or by keeping *Cable Island* out by *Ballicutten Island*.

Dant's Rock.

*Dant's Rock* lies about five miles without the entry to *Cork* harbour, near the W. side,  $\frac{3}{4}$  of a mile from the shore, and about half a cable's-length long: the least water on it is eleven feet. At it *Robert's Head* bears N. W. by N. *Robert's Cove* N. by W.  $\frac{1}{4}$  W. It is avoided on the S. side by keeping *Flat Head* a ship's-length out by *Ranis Head*: it is avoided on the E. side, by keeping *Cork Head* N.: it is avoided on the N. side, by keeping *Robert's Head* N. W. To sail between it and the land, keep within half a mile of the shore.

The *Barrels*.

The *Barrels* are two rocks that lie near the middle of *Courtmasberry Bay*; the southmost of these is small, and dries about low-water, but of sufficient depth quite round half a cable's-length from it: the other rock is larger, and lies about half a mile northward of the former, and is rarely seen above water, being dry only with extraordinary low spring-tides. At the southmost *Barrel Rock*, the extremity of *Old Head of King'sale*, bears S. E. by E. and the *Horfe Rock* (which is always above water) W. by N. The *Barrel Rocks* are avoided on the W. side, by keeping within a mile and a half of the shore on the W. side of the bay. *Horfe Rock* is deep on all sides a ship's-length from it.

Downworthy Rock.

In the middle of *Downworthy Bay* (which is half between the *Seven Heads*, and the entry to *Clonakilty*), there is a small rock that dries about half ebb.

Duly Rock.

*Duly Rock* lies about half a mile W. S. W. from *Gally Head*, and dries about half ebb.

## STOPPING-PLACES.

## Stopping-Places along the Coast, between CABLE ISLAND and GALLY HEAD.

*Ballicutten Bay*.

On the W. side of *Ballicutten Bay*, a vessel may stop with W. or S. W. winds, about two or three cables-length N. of the islands, on from three to five fathoms water.

With



# THE SOUTH COAST OF IRELAND.

## From CABLE ISLAND to GALLY HEAD.

With W. or N. W. winds a vessel may stop in the mouth of the harbour of *Cork*, about a quarter of a mile from the W. side, between *Cork Head* and *Ringabella Creek*, on from nine to six fathoms water.

With winds at the westerly quarter, a vessel may stop in the bay half between *Old Head of Kingale* and the mouth of the harbour, about two cables-length from the shore, on from two to five fathoms.

On the W. side of *Courtmasberry Bay*, a vessel may stop with westerly winds, either off the officer's houses S. W. from *Horfe Rock*, on ten or twelve fathoms; or on the N. side of *Horfe Rock* on four or five fathoms.

In the middle of *Clonekilty Bay*, a vessel may stop, when the wind is off shore, on ten or twelve fathoms, about a mile southward of *Ring Point*.

### CORK Harbour.

HARBOURS.

*Cork* is a very large and good harbour, where ships of any size may ride safe all weathers. The most convenient place of anchorage for great ships, is about half a mile, or a mile, S. S. E. of the fort, on from five to eight fathoms water. Merchant ships may ride off the *Cove*; or smoother and in less tide-way, farther up the harbour, off *Passage*, any where between the first houses, and the extremity of *Roman's Point*. Vessels that draw ten or eleven feet water, may go up to the town of *Cork* with spring-tide: with neap-tides they can go no farther up than the *Black Rock*, or the first march, about half a mile below *Cork*.

To fall in with the harbour of *Cork*, coming from the southward, keep *Knockmellown Hill* a point or two eastward of N. till you see the *Old Head of Kingale*, from which it lies E. by N. about four leagues: when you are off the harbour, *Roche's Tower* (commonly called the *Light House*) is remarkable on the E. point of the entry.

The shoals and banks to be avoided in sailing into this harbour, are *Harbour Rock*, and *Turbot Bank*, near the middle of the entry, and the *Spit Sand*, between *Spike Island* and *Cove*. *Harbour Rock* is a very small rock, near half a mile N. W. by W. from *Roche's Tower*, on which the least water is fifteen feet: *Turbot Bank* lies a quarter of a mile N. of *Harbour Rock*, extending N. W. and S. E. on which the least water is two fathoms, which is on the N. end of it. None but large ships coming in about low water, need be afraid of these shoals. To avoid them on the E. side, keep within two cables-length of the shore on the E. side: or keep *Dog's-nose* N. by E. or keep *Dog's-nose Point* a little to the westward of *Cuskeny* (or *Wiskiny*) Mill in *Great Island*: *Dog's-nose*, just on *Cuskeny Mill*, leads on *Harbour Rock*; and open of it, leads along the W. side of it: by keeping the *Cow Rock*, on *Poor Head*, you avoid it along the S. side. *Turbot Bank* is avoided, while you are nearer the land on the E. side, than on the W. side of the entry.

The *Spit Sand* extends above a mile E. S. E. from *Hawlbowlwing Island*, and shelters the anchorage at *Cove*. It begins to dry on the N. side at half ebb. There are two perches that point out this bank; one at the E. end, and the other on the edge of the N. side opposite to *Cove*.

In sailing from *Dog's-nose* towards *Cove*, avoid the shallow water on the starboard side, which extends a mile N. N. W. and a rock that dries about half ebb on the W. side of *Cork-beg*, by keeping *Dog-nose Point* S. by W. or by sailing right on the eastmost part of the fort.

In sailing from *Cove* to *Passage*, give the S. side of *Black Point* a birth of about-half a cable's length: and along the W. side of *Black Point*, keep above a cable's length from that shore, to avoid a sand which dries at low-water: or sail westward from *Hawlbowlwing Island* till you see *Rona Point* in the channel of *Passage*, then steer northward along the W. side of that channel for the anchorage.

Between *Passage* and *Horfe-head*, there is a spit of sand extending above a cable's-length eastward from *Clay Cliff*, on which there is but six feet water at low spring-tide. The extremity of it is avoided when *Dunkettle House* bears N. N. W. and on a distinguishable grove of trees, on the top of a hill above that house. In riding near this spit of sand, *Belvelly Castle* should either be fairly out, or shut in, by *Ronan's Point*; the castle and point in one leads right on the point of the spit.

### CROSS-HAVEN.

*Cross-haven* is a small creek, within *Cork* harbour, on the W. side, opposite to *Dog's-nose*, where vessels may ride in ten or twelve feet water, and in good shelter. The channel round the point, going in, is very crooked; for which no direction will serve altogether: the best way is to follow the ripple of the tide, which is, for the most part, visible; or to go in about high-water, when a vessel that draws ten or twelve feet will have water over all.

### OYSTER-HAVEN.

*Oyster-haven* is a creek about two miles eastward of *Kingale*, where small vessels may ride in good shelter, on nine feet the least water. There is nothing to fear going in on either side of *Sovereign's Isles*. On the W. side of *Keneda Point*, it shoals near half a cable from the high-water mark, which therefore should have a moderate birth. The best part to anchor in, is on the W. side, in the mouth of that branch which runs westward.

### KINGSALE Harbour.

*Kingale* is a very safe harbour, and capable of large ships; but at low-water spring-tide, such as draw above eleven feet water, must stop in the mouth of the harbour an hour or two, until the water has risen a little; for there are only twelve feet on the bar at low spring-tide. You are over the bar going in, when *Charles Fort* bears E. The most common anchorage is off *Cove*, on four or five fathoms water, a little more than a cable's-length from the shore: but the largest ships may anchor above *Cove*, any where in the channel of the river, which is on the starboard hand, close along the shore, and is not above a cable's-length wide, till you are near the town of *Kingale*, where it is broader. There is a light kept on the *Old Head of Kingale*, and another in *Charles Fort*, within the harbour, to direct the ships in the night-time.

To fall in with the harbour of *Kingale*, from the southward, keep *Knockmellown Hill* N. E. till you see the *Old Head*.

The only rock or shoal near the harbour of *Kingale*, is *Bulman Rock*, which lies a little more than a cable's-length S. S. W. from *Hangman's Point*, on the E. side of the entry. The least water on this shoal is four feet at low spring-tide. To avoid it on the S. side, keep *Oyster-haven Rock* open of *Froward Point*; to clear it on the W. side, keep *Charles Fort* in sight by *Hangman's Point*; or the *Black House* at *Old Fort* its own length by *Money Point*. To sail between *Bulman* and *Hangman's Point*; keep the *Sovereign's Isles* a boat's-length open of *Froward Point*.

To sail into *Kingale* harbour in the night-time, keep the light of *Old Head* S. W. by S. and the light of *Charles Fort* N. N. E.: or when *Old Head* light is right a-stern, keep the light of *Charles Fort* on the larboard bow.

C

COURTMASHERY



## COURTMACSHERRY Harbour.

In this harbour small vessels may lie very safe, near the kay, on two fathoms the least water: but a vessel that draws eight or nine feet, must have half flood to go in, because it is shallow off the point next the kay. About a quarter of a mile E. of which, a vessel may stop on one and a half, or two fathoms water, in a small bight formed by a perpendicular clay cliff: one anchor must lie on the shore, because the channel is narrow, and the tide rapid in it. The channel, from the extremity of *Courtmacsherry Point* into these anchorages, is close along the shore; not above one-third of a cable's-length from it.

## CLONEKILTY Harbour.

This harbour is fit for small vessels only; and very dangerous failing in, or out, when the wind is at the southerly quarter; for then, near the entry, the sea breaks all over, and the channel cannot be distinguished. There are but two feet water on the bar at low spring-tide; so that no vessel ought to run for this harbour in blowing weather, without great necessity, and with three quarters flood. The entry is on the E. side of the island, and the channel near the main. Avoid a rock on the N. side of the *Point of Ring*, which extends to the edge of the channel. Anchor near the main, opposite to the E. end of the island, in the bight next above the narrow: or on the N. side of the island. The other channel, along *Mucker*, is fit for boats only.

*A Description of the Tides, Rocks, Shoals, Channels, Anchoring-Places, and Harbours, between GALLY HEAD and CAPE-CLERE.*

## CHART V.

## TIDES.

## Tides between GALLY HEAD and CAPE-CLERE.

Time of high-water on shore, and out off.

From *Gally Head* to *Cape-clere Island*, it is high-water on the shore, on the full and change days, about four o'clock; but the streams of ebb and flood off the coast do not run westward, or eastward, till three hours after high-water, or low-water, on the shore.

Rise of the tide.

Spring-tides, on this part of the coast, rise eleven feet perpendicular, and neap-tides six or seven.

Direction of the stream.

The stream of flood sets in from the westward, and the stream of ebb from the eastward.

Velocity.

Above a mile from the shore, spring-tides, when strongest, run not above one mile an hour: near the headlands they run two.

## ROCKS and SHOALS.

## Rocks and Shoals along the Coast from GALLY HEAD to CAPE-CLERE.

Duly Rock.

*Duly Rock* lies about half a mile westward of *Gally-Head*, and dries about half ebb. There is no other shoal off this part of the coast, nor no rock but what is always above water and remarkable.

## STOPPING-PLACES.

## Stopping-Places.

W. of *Gally Head*, westward of *Rofs*.

In moderate weather, when the wind is off shore, a vessel may stop on the W. side of *Gally Head*, between it and *Rofs* harbour, and several miles westward of *Rofs*, on clean ground, a mile or half a mile from the shore.

E. and W. sides of *Toe-head*: *Barlog-bay*.

Or in the bay on the E. side of *Toe-head*. Or in the bay on the west side of *Toe-head*. Or in *Barlog-bay*, half a mile from the shore.

## HARBOURS.

## Ross Harbour.

*Rofs* is a small creek, three or four miles northward of *Gally Head*, where small vessels may sometimes find shelter, but it is difficult to go either in or out, except in very moderate weather; for the entry is dry at low-water, and rough and dangerous when the wind is on shore; and the channel variable with the weather, especially when it blows from the S. or S. E. There is ten feet water in the channel at the bar with high-water spring-tide, and eight with neap-tides.

## GLANDORE Harbour.

Vessels may lie very safe near the head of this harbour, off *Balincalla*: there are but four or five feet water there at low spring-tide; but the ground is soft ouze, and they can receive no damage. Ships of twelve feet water may, about high-water, neap-tide, run up a cable's-length, or two, above the house of *Balincalla*, and there lie very safe on soft mud.

The Dangers Rocks.

There are four small rocks, called *The Dangers*, that lie about a mile northward from the mouth of this harbour, and near the middle of the channel: the southmost of these dries at half ebb, and the northmost at four hours ebb. There is a channel on each side of these rocks, sufficiently deep for large ships; but that on the W. side may be reckoned best, because there is a leading mark through it. To sail into *Glandore*, on the W. side of *The Dangers*, keep the E. extremity of the little island next them, on the W. extremity of *Adam's Isle*: these points, a very little open, lead on the northmost of *The Dangers*. To sail along the E. side of these rocks, keep about half a cable from the shore.

Sunk rock near *Adam's Island*.

Between *Adam's Isle*, and *Skillenragga Head*, there is a sunk rock, on which the least water is twelve feet: it is somewhat nearer the island than to the head. To avoid it, keep one-third from the head, or  $\frac{1}{4}$  from the island.

Carrikananim Rock.

*Carrikananim Rock* lies between *Ragged Island* and *Squince Island*, but nearest the latter: it is dry at low spring-tide only. To avoid it on the S. side, keep the westmost of *Black Rocks*, which lies about half a mile N. W. from *Ragged Island* on *Toe-head*.

Rock near *Black Rock*.

About a cable's-length S. W. from the last-mentioned *Black Rock*, there is a small rock that dries about half ebb.



## THE SOUTH COAST OF IRELAND.

From GALLY HEAD to CAPE-CLERE ISLAND and DURSEY ISLAND.

### CASTLEHAVEN Harbour.

This harbour is safe for vessels that draw not above ten feet water. To ride sufficiently sheltered, they must lie about a quarter of a mile above *Reen Head*, and drop anchor when the *Staggs* of *Castlehaven* are seen between *Horfe Island* and the main: or when *Reen-head* bears on the tower upon *Horfe Island*. When it does not blow hard from the S. or S. E. vessels may ride in the bay, at the town of *Castlehaven*, on four or five fathoms water.

### BALTIMORE Harbour.

This harbour is convenient for vessels bound either eastward or westward. Small vessels may ride in it quite well-sheltered, on nine or ten feet the least water, two or three cables-length N. W. from the town of *Baltimore*, when the mouth of the harbour is shut. Larger ships are not so well sheltered; for they must anchor when the mouth of the harbour is quite open, off the old castle in *Sherkin Island*, on three or four fathoms water.

The rocks to be avoided in this harbour, are *Loo Rock* and the *Perch Rock*. *Loo Rock* lies about half a cable's-length N. W. from the high cliff on which there is a turret built, on the starboard hand going in. This rock dries at four hours ebb, and is avoided by keeping near the middle of the entry. Rocks in Baltimore harbour. Loo Rock.

The *Perch Rock* dries at half ebb, and lies about N. N. E. from the last-mentioned turret on the cliff. Perch Rock. There is always a perch kept on it; but this perch is not sufficiently conspicuous at high-water; it ought to be higher. The water is shallow half a cable's-length from the perch on all sides.

### LONG-ISLAND Harbour.

This harbour has good ground, is well sheltered, of easy access, and capable of large ships. They may enter either on the W. or E. end of *Long-Island*, and anchor any where; only avoiding a spit of sand within the harbour, about half a mile from the E. end of the island, which extends northward above half over the channel. The least water on this sand-bank is three feet. In entering along the W. end of *Long-Island*, give the N. W. point, opposite *Goat Island*, a birth of half a cable's-length.

### SCULL Harbour.

This harbour is pretty well sheltered, the ground good, the water from two to  $3\frac{1}{2}$  fathoms deep in the anchorage, which is sufficient for the largest merchant ships; and only one rock to avoid coming in, which lies in the middle of the entry, and dries at two hours ebb. To avoid this rock on the E. side, keep the eastmost point of *Long-Island*, just on the W. end of *Cape-clere-Island*. To avoid it on the S. side, keep the house of *Coney-Island* in sight, by the N. side of the sound of *Long-Island*. To avoid it on the W. side, keep the E. point of *Long-Island* on the W. point of the W. *Calf-Island*. Rock in Scull harbour.

There are several other parts among the islands that lie in the neighbourhood of *Cape-clere*, where vessels might run and find safe anchorage in time of need; but as they are not so much in the way of shipping as those already described, and as the draught will readily point them out, and the nature of them, it is not necessary to be particular in respect to them.

## A Description of the Tides, Rocks, Shoals, Channels, Anchoring-Places, and Harbours, between the Stags of CASTLEHAVEN and DURSEY ISLAND,

### CHART VI.

For the coast from *Castlehaven* to *Cape-clere*, see the preceding chart and description.

On the shores between *Cape-clere Island* and *Durse Island*, it is high-water full and change days about  $3\frac{1}{4}$  o'clock; but the stream of ebb does not begin till two hours later along *Mizen-head*, and three hours later near *Durse*. TIDES.  
Time of high-water.

Flood-tide sets in from the N. W. along this part of the coast.

Off the coast one league, spring-tides, when strongest, do not run above a mile and a half an hour, except near the *Bull and Cow Rocks*, where they run about three miles an hour. Within a mile of *Mizen-head* the stream of ebb, or westward stream, runs  $3\frac{1}{2}$  miles an hour, and commonly makes a rough breaking sea there: the stream of flood, or eastward stream, is scarce sensible there, and no rougher than other parts, except in blowing weather. In the bays the stream of tide is scarce sensible. Direction of flood.  
Velocity of the stream.

Along this coast there are no rocks or shoals that lie a quarter of a mile from the land, except such as are within the bays, which will be described hereafter. There is a small rock that lies about a cable's length southward of *Mizen-head*, and dries about half-ebb; and another which lies about two cables-length S. of *Crow-head*, and dries at two hours ebb. ROCKS and SHOALS.

### Stopping-places between CAPE-CLERE and DURSEY-ISLAND.

STOPPING-PLACES.

A vessel in moderate weather, may stop any where on the N. side of *Cape-clere Island*, above a mile from the shore. Or, southward of *Crook-haven*, on from twenty to thirty fathoms; or in the mouth of *Dunmanus Bay*; or in the mouth of *Bantry Bay*; or between *Crow Head* and *Durse Island*; or near the Sound of *Durse*, eastward of the small island, on ten fathoms; but here there is a pretty strong tide.

### CROOK Haven.

HARBOURS.

This harbour is narrow, but all good ground, well sheltered, and has water sufficient for large ships. It is a commodious place for vessels bound to the eastward. Ships that draw above sixteen feet water may anchor about half a mile up the harbour's mouth nearest the N. side, on  $3\frac{1}{2}$  or four fathoms the least water. Vessels that draw twelve or fourteen feet may go as far up as the house that is next the W. end of the peninsula (commonly called *The Island*), and anchor nearest that side. Vessels that draw but eight or nine feet water, should



should pass the island, or peninsula, and anchor a-breast of the first house in the town of *Crook-baven*. As there can be no sea in this harbour but with easterly winds, it is proper for vessels that come not above the peninsula, to moor N. and S. so that with east winds they may ride between both anchors. Lay the N. anchor either on shore, or very near it. As the ground all over this harbour is soft mud, one need not be afraid to run a vessel above the houses of *Crook-baven* so as to take the ground about half ebb.

## DUNMANUS Bay.

Anchorage. Four-mile-water. Achayesty Creek.

Dunmanus Creek.

Rocks and shoals in Dunmanus Bay. Carberry shoal.

Shoal half-way to Carberry Island.

Carrignaronky.

Rock near Maulrua.

Rock near Ilanluish.

Ledge between Furze Island and Horse Island.

Sugach shoal.

Shoal two miles W. of Sugach.

Shoal near Sheep's Head.

This bay has deep water and clean ground almost all over it, till you go near as far up as *Manin Island*, which is at the head of it: but being open to the W. it is not safe anchorage in the winter-time, or when it blows hard from the westerly quarter; except for small vessels that can ride in *Dunmanus Creek*, or above *Mannin Island*. In the summer-time large ships may ride on good ground any where above *Carberry Island*, particularly on the S. side near *Casfilean Hill*: smaller vessels should go either into *Achayesty Creek*, or *Dunmanus Creek*, or the *Four-mile-water* at *Mannin Island* off the *Four-mile-water*, anchor about a cable's-length E. by N. from *Mannin Island* on  $1\frac{1}{2}$  fathom, muddy ground. In *Achayesty*, take the small island in the mouth of it on the starboard hand, and anchor on five or six fathoms sand. In *Dunmanus Creek*, anchor nearest the W. side on three or four fathoms. In the summer-time a vessel may stop about two cables-length N. of *Hanaluisb*, on fifteen fathoms, where she will be a little sheltered from westerly winds by *Carberry Island*, and the other small island and shoals near it.

About a quarter of a mile W. from the N. W. point of *Carberry Island*, there is a rocky shoal very narrow from N. to S. on which the least water is eight feet. On this shoal the sea swells in the calmest weather, and breaks violently when the wind blows from the westward. It is avoided on the N. side, when the N. W. point of *Carberry Island* is in a line with the top of *Casfilean Hill*, which is distinguishable by three tops, or hummocks. It is avoided on the S. side, when these three tops bear over the middle of *Carberry Island*. To avoid it on the W. side, keep above a quarter of a mile from *Carberry Island*.

From the small island, eastward of *Carberry Island*, a shoal extends above half way to *Carberry*, on which there is not above five or six feet at low water.

On the N. side of *Four-mile-water Creek*, there is a rock called *Carrignaronky*, which dries about low water.

There is a small rock which dries with spring-tide only, that lies somewhat more than a cable's-length from the shore at *Maulrua*, near *Mannin Island*. It bears S. by E. from the E. end of that island.

About half a cable N. W. from *Ilanluish* there is a rock which dries one hour after high-water. This rock is avoided on the W. side, when the E. end of *Furze Isle* bears eastward of *Knockafuca Hill*.

Between *Furze Island* and *Horse Island*, there is a rocky ledge which extends almost quite over, and is covered about one hour before high-water.

*Sugach* is a blind rock below *Dunkelly* houses, about a cable's-length from the shore, on which the least water is six feet.

About two miles westward of *Sugach*, below the W. end of *Knockafuca Hill*, there is a rocky shoal above a cable's-length from the shore, on which the least water is said to be seven or eight feet.

Below the highest cliffy part of *Sheep's-head*, there is a small shoal about a cable's-length from the shore, on which the least water is said to be five feet.

## BANTRY Bay.

Anchorage.

Glengarav harbour.

Adrigole harbour.

*Bantry Bay* is a large, safe, and commodious place for ships and vessels of all sizes. The stream of tide is scarce sensible in any part of it; the water is of sufficient depth almost close to the shore on both sides; and no rocks or shoals in the way going up, but what may be easily avoided even in the night-time. Ships may stop in the middle of the bay any where on good ground; or, in most parts, near either side. The best anchorage for large ships is at the E. end of *Whiddy Island*, either on the N. or S. side of *Horse Island*, on from six to ten fathoms water. It shoals about a cable's-length N. W. from *Horse Island*, which must be attended to in dropping anchor in that neighbourhood. The entry to this anchorage along the S. side of *Whiddy Island* is only for small vessels; except about high-water, when there is fifteen feet in the shallowest part of the channel.

*Glengarav* harbour, on the N. side of *Bantry Bay*, opposite to *Whiddy Island*, is good anchorage, and a very safe place. In the summer-time the largest ships may ride in the mouth of it on seven or eight fathoms good holding ground. In winter the smoothest and best sheltered part of this harbour is on the N. E. end of *Garinish Island*, near the two smaller islands, on  $3\frac{1}{2}$  or four fathoms the least water.

*Adrigole* harbour is well sheltered, and may be convenient for small vessels. It is said to be subject to violent squalls of wind from the mountains. Keep near the middle in the entry of this harbour; take the little island as you go up, on the larboard hand, and anchor on the N. E. side of that island on three fathoms the least water.

## Rocks in BANTRY BAY.

Ducalla Rock.

Rock and ledge near Roanbarrick Island.

Culeroch Rocks.

Geran Rocks.

Rock S. E. from Glengarav harbour.

Rock in Combola Bay.

*Ducalla Rock* lies near a mile E.  $\frac{1}{2}$  S. from *Roanbarrick Island*, and is dry about low water only. To avoid this rock on the S. side, keep the point of *Rimore* on the sharpest topped hill eastward of the head of the bay: it seems one of the remotest hills within view.

About half a mile northward of *Roanbarrick Island*, there is a rock always above water: from the S. side of this rock, a ledge, part of which is dry at low water only, extends southward about one third over to the island.

On the W. side of *Culeroch Cove*, near *Glengarav* harbour, there are three small rocks which extend from a little island about half a mile, and dry about half ebb.

The *Geran Rocks* lie about half a mile W. from the W. point of *Whiddy Island*; the westmost of them is covered only with spring-tide; that next to it is always above water, and is deep within half a cable's-length of the N. and S. sides.

About half way between the mouth of *Glengarav* harbour and a rock always above water, which lies off a point above a mile south-eastward of the harbour, there is a rock above a quarter of a mile from the shore, which dries about half ebb.

In *Combola Bay*, there is a rock near the middle, which dries about half ebb.

## BEAR-HAVEN Harbour.

*Bear-haven* is an extraordinary good harbour; large, well-sheltered, sufficiently deep for the greatest ships, and the ground very good every where. There are two entries to this harbour; one along the W. end of the island, the other along the E. end: the W. entry is most direct, and readiest for vessels coming from the westward.



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ward, or southward; but the E. entry is rather safest for one that is a stranger. The anchorage is any where on the N. side of *Bear-Island*, from five to eleven fathoms water. A ship that stops here only for a wind, will find the W. end of the harbour most convenient.

In the W. entry there are two rocks to be avoided, one on the starboard hand, always below water; the other on the larboard, off *Dunbui Bay*, which dries at low water. The shoal on the starboard hand, coming in, lies within half a cable's-length of the shore, a little past the narrowest part of the entry, where the higher cliffs terminate; the least water on it is six feet. The other, called the *Colt Rock*, lies about one-third from *Dunbui*, and two-thirds from *Bear Island*. It bears from *Dunbui House* E.  $\frac{1}{2}$  N. To avoid it on the E. side, keep near the middle: or keep *Turret House* on *Brandy Hall*; or a little open of each other.

In coming into *Bear-haven*, along the E. end of the island, the *Coranmadry* rocks are the only danger: the eastmost of them lies about half a mile eastward of the E. point of the island, and is quite covered only at high-water spring-tide. These rocks are avoided by keeping the middle, or nearer to the little island *Roan-barrik* than to the point of *Bear-haven*.

Rocks in the W. entry to Bear-haven.

Colt Rock.

Coranmadry Rocks near E. entry.

NAUTICAL DESCRIPTIONS

OF THE

WEST COAST OF IRELAND,

FROM DURSEY ISLAND TO MALIN HEAD.

A Description of the Tides, Rocks, Shoals, Channels, Anchoring-places, and Harbours, between DURSEY ISLAND and VALENTIA ISLAND.

CHART VIII.

Tides between DURSEY ISLAND and VALENTIA ISLAND.

TIDES.

ON the W. of Ireland, the principal stream of flood sets in from the westward; and near the *Skellig Rocks*, divides into two branches; one of which runs northward along the coast, detaching smaller streams into all the bays, rivers, and channels in its way: the other branch runs south-eastward to the *Bull and Cow Rocks* near *Dursef Island*, and from thence E. S. E. along the S. coast of Ireland to the *Irish* channel, and to *Bristol* channel.

Direction of the principal stream.

It is high-water on the shore in *Kenmare River*, on the full and change days, at  $3\frac{1}{4}$ . In *Ballinskellig's Bay* at  $3\frac{1}{4}$ . In *Valentia* at  $3\frac{1}{4}$ .

Time of high-water in Kenmare. Ballinskellig's Bay. Valentia.

At the *Bull and Cow Rocks*, the stream of flood does not set in from the north-westward till it is three hours of flood on the adjacent shore; nor the stream of ebb from the south-eastward, till it is three hours fallen on the shore.

Time at the Bull Rock by the stream.

At *Dursef Island*, and in *Kenmare River*, and as far northward as *Valentia*, spring-tides rise eleven or twelve feet perpendicular; neap-tides five or six.

Rise of the tide.

Between the *Bull Rock* and *Dursef*, spring-tides, when strongest, run about three miles an hour; neap-tides one. In *Dursef* found the stream runs four miles an hour when strongest. In *Kenmare River*, it is scarce sensible till you are as far up as *Rosmore Island*, where it runs about half a mile an hour. At the *Skelligs* it runs about one mile an hour when strongest.

Velocity of the stream near Dursef Island. In Kenmare. At the Skelligs.

There are no shoals lying off this part of the coast; nor any rocks but what are always above water, and for the most part remarkable, and have deep water close to them; excepting a small rock that lies about half a cable's-length S. E. from the *Lemon Rock*, and dries about half ebb.

ROCKS and SHOALS.

Stopping-Places between DURSEY ISLAND and VALENTIA ISLAND.

STOPPING-PLACES.

In moderate weather, if the wind is at the westerly quarter, a vessel may stop any where between *Dursef Island* and *Crow Head*.

S. side of Dursef.

On the N. side of *Quoylach Bay*, above two cable's-length from *Inishfarnaard Island*, a ship may stop on from fifteen to twenty fathoms. Near two cable's-length W. N. W. from the W. extremity of this island, there is a small rock which dries about low-water. Also near half a mile W. by S. from it there is a small shoal called *Tripolofteeken*, on which the least water is  $2\frac{1}{2}$  fathoms, and always breaks with westerly winds; the shallow part is not above a ship's-length long. At this shoal the W. end of *Dursef Island* is a ship's-length out by *Cod's Head*: therefore, shut in *Dursef* by *Cod's Head*, and it is avoided on the S. side. There is also a shoal in the middle of *Quoylach Bay* that breaks with westerly winds: at this shoal *Carrikel* is half its length open of the point of *Urrin* next to it, and the E. end of *Inishfarnaard* bears N. On the E. side of this shoal a vessel may stop on sixteen fathoms water.

In Quoylach Bay.

Rock and Shoal near Inishfarnaard.

Shoal in the middle of Quoylach Bay.



## From DURSEY ISLAND to VALENTIA ISLAND.

In Sneem Bay.

A ship may stop in the mouth of *Sneem* harbour on good ground, moderate depth, and pretty good shelter, somewhat nearer the W. than the E. side of that bay; or about half a mile S. of *Garinish Island* on nine fathoms.

In Rossmore Bay.

In *Rossmore Bay* a vessel may stop on good ground. Anchor nearest the W. side, about half up, so as to be sheltered from the S. W. winds by the rock which lies off the W. point of the entry, which is covered only with high spring-tides.

On E. side of Rossmore.

A vessel may stop on the E. side of *Rossmore*, on sixteen fathoms good ground.

In sailing past *Rossmore Island*, avoid the *Maiden Rock*, a shoal on which the least water is six feet. It lies between *Ardea* and *Rossmore*, but nearest *Rossmore*, abreast of a small inclosure there, which is at the W. end of a bush of wood. At this shoal, *Ardea Castle* bears S. S. E.  $\frac{1}{4}$  E. and *Ormond's Isle* E.  $\frac{1}{4}$  S. It is avoided by keeping one-third from the shore on either side of the river. On the N. side of it, *Ormond's Island* bears half a mile on the land next eastward. On the S. side of it, a remarkable tapering hill, westward of *Pulinnarab*, bears on the top of *Hog Island*.

In the middle of the river there, and eastward.  
Roanbarrick Rocks.

Or a vessel may stop in the middle of the river, any where between *Sneem* and *Rossmore*. Or any where eastward of *Rossmore*, as far as *Dunkerran Island*, taking care to avoid *Roanbarrick Rocks*, near the middle of the river, which extends about a mile westward of *Kepinacosh Islands*.

One rock at the W. end of this ledge, and another near the E. end, are always above water. About a cable's-length and a half S. by W.  $\frac{1}{4}$  W. from the highest rock at the W. end of *Roanbarrick Rocks*, there is a small rock which dries a little before half ebb. The water is deep, close to the S. side of this small rock.

In Baliniskellik's Bay.

In the summer-time, a ship may stop on the N. side of *Baliniskellik's Bay*. The best part is on the N. side of *Baliniskellik's Isle*, a little more than a cable's-length N. by E. from the E. point of the island, on  $4\frac{1}{2}$ , or five fathoms, when the point is on, or a very little open of *Hog's Head*. With westerly winds a great sea sets into this bay; and when it blows hard, the ground, though clean, has been observed not to hold sufficiently.

In Kilimloch Bay.

In summer-time, and the wind off shore, a ship may stop in the bay of *Kilimloch*, between *Puffin's Island* and *Brea-Head*, in *Valentia Island*; the water there is from twenty-four to thirty-six fathoms deep, but clean sand.

## HARBOURS.

## Harbours in KENMARE RIVER.

This river (more properly an arm of the sea) has deep water and clean ground in almost all parts of it that are above a quarter of a mile from the land; and nothing that any ship need be afraid of, out of the bays, but *Maiden Rock* off *Rossmore Island*, and *Roanbarrick Rocks* near *Kepinacosh Islands*, which have been already described with the parts fittest for stopping in. The best harbours in *Kenmare*, are *Sneem*, *Ardgrume*, *Kilmichaeloag*, and *Danish Island*.

## SNEEM Harbour.

What is properly called *Sneem* harbour, is that part of the bay which is sheltered on the S. by the E. point of *Garinish Island*. This part of *Sneem* is good ground, and the depth sufficient for large ships; but there is not room to ride with more than half a cable, without riding on the shallow water, except while the wind is W. The middle of the harbour is more exposed, and the bottom foul in several parts, and therefore not fit to ride in long. This harbour, however, may be found more convenient than any other in *Kenmare* for a vessel that is bound to the eastward.

## ARDGRUME Harbour.

Shoal crossing Ardgrume Bay.

*Ardgrume* harbour is on the S. side of *Kenmare*, opposite to *Sneem*, is good ground, well sheltered, and the depth of water sufficient for large ships; but there is a rocky shoal which crosses the bay as you enter, from side to side. The least water on this shoal is five feet; except on the W. end next the small point, where it dries at low-water above a cable's-length off shore. A ship that draws ten feet water must have half tide to go in. The best course in, is on the W. side of *Carrikavanbeen Rock*, which is always above water, and to cross the shoal about the middle, or nearest the E. end, and to anchor in the creek, on the W. side of the bay, on four or five fathoms water, a little westward of the *Beachy Point*.

Shoal E. of Carrikavanbeen.

On the E. side of *Carrikavanbeen Rock*, there is a shoal that extends above a cable's-length from it, on which the least water is twelve feet.

## KILMICHAELOAG Harbour.

*Kilmichaeloag* harbour is well sheltered, good ground, and capable of large ships. The anchorage is either on the E. or W. side of *Dutch Island*, on five or six fathoms water. On the E. side of the entry of this harbour, there is a rocky shoal, called *Carriknaclour*, which extends W. S. W. from the corner of the *Graffy Cliff*, above one third over; six feet is the least water on the W. end of it; about the middle, the weeds appear at low spring-tide, when there is about four feet on it. To avoid this shoal, keep nearest the W. side; or keep *Dutch Island* S. by E. when it will be in a line with the eastmost top of *Drume Hill*, on which there are three sharp hummocks. If a vessel is to stop here any considerable time in winter, or is not provided with good anchors and cables, she may go into the creek on the E. side of the harbour, and ride smooth and easy on two fathoms water, sheltered on the W. by a small island, or beachy point. To sail into this creek, and avoid the shoals on each side of the entry, take the westmost house of *Kilmichaeloag* in a line with the middle of the flat-topped hill above it.

## BALlichroaan Harbour.

*Ballichroaan* harbour, at the head of *Quoylach Bay*, is a safe and well-sheltered creek for small vessels; but they cannot ride in it with more than half a cable out. Drop anchor about a quarter of a cable's-length E. of a small rock, the top of which is always above water, and lies E. of the middle of *Bird Island*. The depth in this creek, is from  $2\frac{1}{2}$  to four fathoms.

## VALENTIA Harbour.

This harbour is good ground, well sheltered, and capable of the largest ships. The best entry to it is at the E. end of *Valentia Island*, where the best anchorage also is. Anchor on the S. side of *Begginish Island*, any where between it and the *Foot*, or eastmost point of *Valentia*, on five or six fathoms water, above a cable's-length from the shore: or pass *Foot Point*, and anchor off the *House Ringlafs* on four fathoms.

Rocks in the E. entry of Valentia.

In the E. entry of *Valentia*, there is a rock nearest the W. side, about a quarter of a mile southward of the ruinous houses, called *Cromwell's Fort*; which dries at a quarter ebb, and is to be taken on the starboard hand going in. You are on the N. side of this rock, half a cable's-length, when the S. point of *Begginish Island* bears on the sharp-topped hill next eastward of *Reenaard Point*. You avoid it on the E. side, when the tapering hill



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From VALENTIA to the Mouth of the SHANNON.

hill on the *Great Blasket* bears on the extremity of the *Fort Point*. Near the W. end of *Begginish Island*, over-against *Cromwel's Fort*, there are two small rocks that lie a quarter of a cable's-length farther out than other rocks there that are always above water: one of these dries at half ebb, the other about low-water. In turning out or in, that part of *Begginish* must have a suitable birth.

There is a gravelly beach, which extends from the *Foot Point* of *Valentia*, eastward, toward *Rinaard Point*, about half over; the extremity of it is dry with spring-tide only. To avoid this shoal, keep one-third from *Rinaard Point*, and two-thirds from *Foot Point*. Or keep *Ardcoft House* a little eastward of the E. top of *Termoil Hill*, when they will bear S.  $\frac{1}{4}$  E. *Ardcoft House* is a small hut, which stands close to the shore, between two turf-banks, at the W. end of *Cahir parish*. *Ardcoft Hut*, on the middle of the E. top of *Termoil*, leads right on the extremity of this shoal.

The W. entry to *Valentia* harbour, is clear of shoals as far up as *Portmagee*: right opposite to which, on the *Valentia* side, there is a small bay where a vessel may stop on two fathoms, clean sand, and pretty good shelter. To go up farther into better shelter, requires high-water and a skilful pilot. For when you pass the small island at *Portmagee*, there are shoals on each side, and the channels between them narrow and irregular.

## A Description of the Tides, Rocks, Shoals, Channels, Anchoring-Places, and Harbours, between VALENTIA ISLAND and the Mouth of the SHANNON.

### CHART IX.

#### Tides between VALENTIA and the SHANNON.

TIDES.

On the shores in *Dingle Bay* it is high-water, full and change days, at  $3\frac{1}{4}$ : at the *Blaskets*, and from thence to the mouth of the *Shannon*, at  $3\frac{1}{2}$ .

Spring-tide, on this part of the coast (excepting the *Blaskets*) rises  $11\frac{1}{2}$  feet; neap tides six or seven. At the great *Blasket*, spring-tides rise only eight or nine feet, and neap-tides four or five.

The stream of flood along the *Blasket Isles* sets in from the S. S. W. and ebb from the N. N. E.

Direction of the stream.  
Velocity.

Spring-tides, when strongest in the Sounds of the *Blaskets*, run not above two miles an hour. In *Dingle Bay* not above half a mile an hour, till near the mouth of *Castlemain Harbour*, where it runs about two miles an hour over the bar, and in that channel. From the *Blaskets* eastward to the *Shannon*, the stream of tide is scarce sensible.

#### Rocks and Shoals from VALENTIA to the SHANNON.

ROCKS and SHOALS.

In *Dingle Bay* there are no rocks or shoals to be feared along the coast, on either side, but *Crow Rock*, near *Dingle harbour*, on the N. side, and a small rock on the opposite part of the bay, that lies near half a mile eastward of *Cuinglass Point*, and dries with spring-tide only.

*Crow Rock* lies half a mile westward of the mouth of *Dingle harbour*, and near half a mile from the shore; it is covered with high spring-tide only, and is steep too on all sides.

The *Fofe* is a pretty high rock, always above water, and no shoals near it, which lies about a league westward of the westmost *Blasket Island*. There is a smaller rock about a mile eastward of it, which the sea commonly washes over, but is never quite covered.

Rock near Tiraght.

About a quarter of a mile south of *Tiraght Rock*, there is a small rock that dries about half ebb.

Rock near the Great Blasket.

Northward of the E. end of the *Great Blasket*, there is a cluster of rocks that extend about a mile off. Some of them are always above water, others appear at half ebb, and some at low water only. The northmost of these rocks are always above water, and will serve as a beacon for avoiding the whole on the N. side.

In the Sound of the *Great Blasket Island*, there is a small rock that dries about half tide. It lies above a cable's-length W. N. W. from a remarkable rock near the point of *Dunmore*.

Rock in the Sound of the Great Blasket.

*Muckloch-beg* is a small rock always above water, which lies about a mile N. E. from the E. point of *Macbri*, near *Tralee Bay*. About half a mile E. N. E. from this rock there is a rocky shoal, on which the least water is twelve feet. On this shoal the sea swells or breaks in, or before, blowing weather. To avoid it going into, or out of *Tralee Bay*, keep at least one-third from *Muckloch-beg*, and two-thirds from *Muckloch-Rock*. A shallow ledge runs out S. W. above a cable's-length from *Muckloch-beg*, and another as far S. E. from it.

Muckloch-beg Shoal.

There is a shoal about a quarter of a mile northward of *Muckloch Rock*, on which there is a swell in moderate weather.

Shoal near Muckloch.

The *Falfe Boat* is a small rock that dries before half-ebb, which lies about two cables-length E. of a low rock next *Muckloch*.

Falfe Boat.

#### Stopping-places between VALENTIA and the SHANNON.

STOPPING-PLACES.

In moderate weather a ship may stop above a mile from the shore, almost in any part of *Dingle Bay*, on clean ground.

In Dingle Bay.

In the summer-time, and moderate weather, a vessel may stop off the E. end of the *Great Blasket*, about a cable's-length from the shore: but the ground will not hold well in blowing weather.

Near the Great Blasket.

In the summer-time a vessel may stop on the W. side of *Brandan Bay* on clean ground. This bay is not safe in the winter; nor is it prudent to lie long in it, even in summer; for N. and N. W. winds set in a very great sea into it; and it is also subject to violent squalls from the neighbouring mountains, when the wind blows fresh from the S. or W.

In Brandan Bay.

In the summer-time a vessel may stop in *Tralee Bay*, westward of *Fenis*, near the middle, on  $3\frac{1}{2}$  or four fathoms water, but should not lie long in the open bay.

In Tralee Bay.

#### VENTRY Harbour.

HARBOURS.

This harbour is of easy access, all clean ground, and capable of the largest ships. It is sufficiently safe to ride in in the summer-time; but in winter, when it blows hard from the westerly quarter, such violent squalls of wind come off the mountains, that it is not thought the ground would hold an anchor sufficiently. The best part of this bay for large ships, is about half up, and near the middle, on  $4\frac{1}{2}$  or five fathoms water; where there



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there is sufficient room to veer off cable if it is necessary. Small vessels may go farther up, and ride nearest the S. side.

*DINGLE Harbour.*

This harbour is fit for small vessels only, and these must lie aground at low-water; but it is on soft mud, where they can receive no damage. There are some spots a little westward of the point of *Ring-beg*, where there are two or three fathoms at low-water; but they are of small extent, and in narrow channels, which do not admit of half a cable to ride with. In coming into *Dingle* harbour, take a leading wind, flood tide, and keep about a third from the W. side of the entry, to avoid a ledge of rocks which extend about half over from *Lach-Point* to *Ring-beg*. At *Ring-beg Point* steer westward, and anchor when the mouth of the harbour is just shut, and the houses of *Carew* bearing about S. W. about a cable's-length from the shore. In the way to this anchorage, there is a sand-bank which dries at low-water spring-tide: it lies about half a cable northward of *Ring-beg Point*; but as there is neither buoy nor perch on it, no written direction will serve for avoiding it about low-water.

*CASTLEMAIN Harbour.*

This harbour is of difficult access, having a bar across the mouth of the entrance, on which there is but nine feet water at low spring-tide, and a spit of sand on each side of the channel, which extend westward from the harbour's mouth near two miles: one from *Rosbeeb Point*, and the other from *Insh Point*, which have neither a buoy nor a perch on them: but when a vessel has got within the harbour to the proper anchorage, she may then ride safe all weathers. Ships that draw twelve feet water may go over the bar at half tide. You are within a mile of the bar, when *Aker Hill* bears N. by W. and *Rosbeeb Point* E.  $\frac{1}{2}$  S. and then these two spits of sand, one on each side of the channel, may be distinguished by the breakers; for they are very rarely without breakers, even in a calm.

To sail over the bar, it is necessary to have a pilot; for there are no landmarks which a stranger can be made to understand easily. In case no pilot can be got, the following direction may be serviceable in a case of necessity: keep a little nearer to the S. side of the bay than to the N. till the breakers on the spits are seen; which they will be a mile or two off, even in dark weather: then steer right between the breakers, keeping *Rosbeeb Point* E.  $\frac{1}{2}$  S. and giving it a birth of a full cable's-length: at *Rosbeeb* steer about E. N. E. on the houses of *Cromaan*: abreast of which, about two cables-length from the shore, you may stop on three or four fathoms water, till a pilot from the shore brings you to better anchorage; which is westward of the point of *Cromaan*, on the N. E. side of a patch of sand, which dries at three quarters ebb, where the depth is from two to six fathoms. A small vessel may ride on the E. side of the point of *Cromaan*, on two fathoms the least water, a cable's-length or two off shore.

*SMERWICK Bay.*

This bay is not safe to anchor in, except in the summer season, or in moderate weather; for N. and N. W. winds set in a great sea into it. The bottom is for the most part sand, but with rocks here and there scattered through it; so that one should be cautious where he drops anchor. The safest part of this bay, and the greatest extent of clean ground is on the W. side, below *Smerwick* village, somewhat more than a cable's-length from the shore, on six or seven fathoms water.

*TRALEE Harbour.*

This harbour is eastward of the eastmost, or largest, of the two *Sampshire Islands*, in the channel of the river. The ground holds well, and the islands break off the violence of the sea: but as the channel is narrow, a vessel cannot ride with more than half a cable, except when the wind is E. or W. The best anchorage is on the E. side of the largest island, when the middle of it bears W. about a cable's length, on three or  $3\frac{1}{2}$  fathoms water. Sail in with flood-tide, and keep about half a cable from the S. side of the island, and moor E. and W. in the stream, which runs about two miles an hour when strongest.

*A Description of the Tides, Rocks, Shoals, Sand-Banks, Channels, Anchoring-Places, and Harbours, in the River SHANNON.*

## C H A R T X.

*The River SHANNON.*

The *Shannon* is a river of easy access, where fleets of the largest ships may ride in safety all weathers. There is a light kept on *Loop Head*, at the mouth of the river, which may be seen four leagues off. At a greater distance from the land, its place on the coast may be distinguished readily by the *Blasket Islands*, and by the *Brandon Mountains*, which may be perceived fifteen leagues off.

There are few parts in this river, above *Kilcadraan Point*, where it begins to be narrow, but a vessel may stop, on clean ground and in pretty good shelter. The best places for large ships to ride in, are *Labisheda Bay* in *Rien* parish; and on the E. side of *Rinellan Point*, as far up as *Foyn's Island*.

## TIDES.

*Tides in the SHANNON.*

Time of high-water.

It is high-water in the mouth of the *Shannon* full and change days at  $3\frac{1}{4}$ ; at *Foyn's Island* at five; and near *Limerick* at six.

Rise of the tide.

At *Carrigbolt*, and as far up as *Foyn's Island*, ordinary spring-tides rise eleven or twelve feet perpendicular, and neap-tides six or seven. At *Foyn's Island*, and eastward to *Limerick*, spring-tides rise sixteen feet perpendicular, and neap-tides eight or nine.

In



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## The River SHANNON.

In the channels near *Kilcadraan Point*, near *Scattery Island*, off *Tarbut Point*, and off *Rinellan Point*, spring-tides, when strongest, run  $3\frac{1}{2}$  miles an hour, and neap-tides  $1\frac{1}{2}$ . In other parts of the river, that are not within bays, spring-tides run about two miles an hour, and neap-tides less than one.

### Rocks and Shoals in the SHANNON.

The *Bar of Beal* is a sandy shoal, which extends about half a mile northward from *Beal Point*, part of which dries with spring-tide about a quarter of a mile from the shore. The deep channel, near the outer edge of it, may be distinguished by a ripple, or rough sea, except at slack water. On the outer edge of it  $3\frac{1}{2}$  fathoms is the least water; in the ripple near the edge of the shoal, there are from fourteen to eighteen fathoms. To avoid this shoal, keep *Ray Hill* shut in a little by *Kilcadraan Head* or *Cliff*.

*Binanna* is a rocky shoal that extends southward three quarters of a mile from the S. end of *Scattery Island*, but there is a channel sufficiently deep between it and that island. The shallowest part of this shoal is on the N. end, where the least water is  $2\frac{1}{2}$  fathoms, on other parts of it there are  $3\frac{1}{2}$  or four fathoms: so that none but large ships, about low-water, need be afraid of this shoal. At the N. end of it, the tower of *Scattery* bears on the W. end of the *Clay Cliff* of *Rinanna*, or S. end of *Scattery*; and the N. end of a hummock that may be perceived on *Kilcadraan Head*, bears on the top of *Ray Hill*. At the S. end of it, the top of *Ray Hill* is just out by *Kilcadraan Head*. To avoid it on the S. end, keep in the middle of the channel; or keep the top of *Ray Hill* a little southward of *Kilcadraan Head*. To sail between it and *Scattery*, keep *Kilcadraan Head* on the S. end of *Ray Hill*; when you will be about a cable's-length from the island.

Along the W. side of *Scattery*, it shoals about half a cable's-length from the shore in most parts.

Along the N. side of *Scattery*, there is a rock which lies above a cable's-length from the shore, and dries with spring-tide only: and a sand-bank reaching from the E. end of that rock to the N. E. point of *Scattery*.

On the E. side of *Scattery*, opposite to *Hog Island*, there is a small rock about a cable's-length from the shore, which dries with low spring-tide only.

Near the old buildings, on the E. side of *Scattery*, there is a spit of sand extending above a cable's-length S. S. E.  $\frac{1}{2}$  E. from the point, on which the least water is one fathom. This must be attended to when ships anchor near this part of the island.

*Carrikvillan Rock* lies about a cable's-length from the shore of *Kilkerran*, and almost in the direction of a straight stone dyke that runs north-eastward to the top of the hill, or rising ground above the shore. It is dry with spring-tide only. To avoid it on the S. side, keep the tower of *Scattery Island* on, or southward of, the high-water mark of *Tarbut Point*. The N. end of the rock that lies near *Tarbut Point*, bearing on the tower of *Scattery*, leads on *Carrikvillan*. There are two fathoms between this rock and the shoal of *Kilkerran*. To sail through this channel, if necessary, keep half a cable's-length from the shore.

About a quarter of a mile eastward of the N. point of *Achnish Island*, there is a rock called *Carrikaginan*, which dries about half-ebb; and other rocks about half a mile eastward of the little island next *Achnish*: to avoid these rocks, keep *Beb Castle* on the N. end of the hill beyond *Limerick*, called *The Keepers*.

*Carrikaronki*, or the *Seal Rocks*, lie about a mile E. by N. of the N. point of *Achnish Island*, and begin to dry about two hours ebb. To avoid them on the S. side, keep *Beb Castle* on the middle of the low hill which extends northwards from *The Keepers*. Or keep the middle of *Knockinore Hill* on, or a little southward of, *Rinellan Point*, opposite *Foyn's Island*. They are avoided on the W. side, when the houses of *Low Island* are in a line with the top of the hill of *Inishtagrume Island*.

*Horfe Rock* lies near a mile southward of the *Seal Rocks*, and is covered only with spring-tide. *Rinellan Point* shut in by *Achnish Point* a ship's-length, or two, clears it on the N. side.

There are four rocks on the long sand-bank that lies on the N. side of the channel, between *Beb Castle* and *Sod Island*, the westmost of which is called *Carrikacloush*, and begins to dry at half-ebb; the rock next E. to that at two hours ebb; the third is not quite covered with dead neaps; the fourth, or eastmost rock, dries at three quarters ebb. The W. end of the sand, on which these rocks lie, is always below water; and the depth on it is from two feet to six. The extremity of this part of the sand, bears N. E. from *Beb Castle*.

About S. by E. from *Carrikacloush Rock*, in the middle of the channel, there is a small rocky shoal, not half a cable's-length long from N. to S.: the least water on it is four feet. To avoid this shoal on the N. side, keep the N. point of *Foyn's Island* a boat's-length out by the high-water mark of *Ballinbochag Point*; which is the W. end of the point at *Beb Castle*.

*Bridge Rocks* lie near two cables-length N. of *Reinnylan Point*, and dry about half-ebb. To avoid them on the N. side, keep the point of *Foyn's Island* on *Beb Castle*; or between *Beb Castle* and the high-water mark of *Ballinbochag Point*.

Near half a mile E. of *Sod Island*, there is a small rock which dries about four hours ebb.

To sail in this channel from *Ballinbochag Point*, which is next W. of *Beb Castle*, to *Sod Island*; give *Ballinbochag Point* a birth of about a cable's-length and a half; and when you are past *Beb Castle*, keep the point of *Foyn's Island* a boat's-length out by *Ballinbochag Point*, till you are near abreast of the rock next E. of *Carrikacloush Rock*; or till a remarkable white house, on the S. side of the river, is out on the E. side of a green hill, near the river, and divided by inclosures: then keep the point of *Foyn's Island* on *Beb Castle*, till you are up with *Sod Island*, and give it a birth of a cable's-length, or half a cable's-length, and steer for *Key Island*, or a little southward of it.

There are several rocks and shoals in the channel, between *Key Island* and the town of *Limerick*, particularly a little eastward of *Busb Island*, and the *Whelps* and *Scarlets* off *Newtown Point*, which dry about three quarters ebb. But as no description could supply the place of a pilot in this part of the river; and as it is fit only for small vessels, the draught will shew sufficiently where these rocks and shoals lie.

The river *Fergus* is fit for small vessels only. In the mouth of it are the following rocks to be avoided.

About two cables-length E. S. E. from the southmost of the small islands, that lie eastward of *Low Island*, there is a rock which dries before half-ebb; and another rock about half a mile E. S. E. of it, which dries with spring-tide only. The channel up the *Fergus*, lies between these two rocks; but as there are no land-marks, that could be made intelligible to a stranger, for sailing between them, it is necessary to have a perch, or a buoy, either on the one or the other, before one unacquainted should attempt this channel until the westmost rock appears; which will then be a sufficient direction for the channel between them.

About half way between these last rocks, and *Inishtagrume Island*, there are two small rocks on the E. edge of the channel, which dry at low-water. They are called *Bracanish Rocks*.

In the middle of the channel, between *Finish Island* and *Inishtagrume Island*, there is a rock which dries about half-ebb, called *Road Rock*.

ROCKS and SHOALS

Bar of Beal.

Binanna Shoal

Shoal near Scattery.

N. side of it.

E. side of it.

Spit on the E. side.

Carrikvillan Rock.

Carrikaginan Rocks.

Carrikaronki Rocks.

Horfe Rock.

Rocks on Bridge Sand.

Shoal S. by E. from Carrikacloush Rock.

Bridge Rocks.

Rock E. of Sod Island.

To sail from Ballinbochag to Sod Island.

Rocks from Sod Island to Limerick.

Rocks in the mouth of the river Fergus.

Rocks half way to Agrume Island.

Road Rock.

E

There



*The River SHANNON, MAL BAY.*Ledge and sand near  
*Inishtagrume*.Rock opposite to *Ing*  
Point.

HARBOURS.

There is a rocky ledge that extends above a cable's-length eastward of the small island that lies near the E. end of *Inishtagrume*, which dries a little after half-ebb: and a patch of sand, about a cable's-length northward of the extremity of the ledge, which dries about low-water.

On the W. side of this channel, opposite to the point of *Ing*, there are two small rocks together, that dry about half-ebb.

*Anchoring-Places in the SHANNON.**CARRIGHOULT Anchorage.*

This bay is all clean ground; and between *Carrighbault Castle* and *Kildadraan Point*, the ground holds well, having clay below the sand. Anchor when the castle bears N. and *Kildadraan Point* S. S. W.  $\frac{1}{2}$  W. In *Carrighbault Bay*, the stream of tide runs always southward; about a mile and a half an hour when strongest. Between *Kildadraan Point*, and the opposite side of the river, spring-tide, when strongest, runs between three and four miles an hour: therefore, a vessel coming into the *Shannon* requires flood-tide, or a brisk breeze of leading wind, to stem the ebb.

*SCATTERY Road.*

The best anchorage, near *Scattery*, is on the E. side of it, when the S. point of the island shuts in *Beal Point* (but not *Beal Castle*), and the tower in *Scattery* bears N. N. W.  $\frac{1}{2}$  W.; there you ride on six or seven fathoms, strong clay ground. In coming up to *Scattery*, avoid the bar of *Beal*, and *Rinanna Shoal*, if necessary, as above directed: also the tongue of land off the middle point of this island.

*OYSTER-HOLE Anchorage.*

*Oyster-hole* (or *Poolnibary*) is a creek near two miles northward of *Scattery Island*, where small vessels may ride safe on  $1\frac{1}{2}$  fathom the least water. In sailing in, avoid a rocky ledge on the starboard hand, about half a mile S. of the entry, which dries about half ebb. Anchor in the bight on the N. side of *Comoag Point*.

*TARBURT Anchorage.*

In the bay of *Tarbutt* a ship may stop on four or five fathoms water, about a cable's-length S. of the point of *Tarbutt*; especially with flood-tide, which, in this place, has very little strength: but as ebb runs three miles an hour with spring-tides, it may be inconvenient to moor, or to lie long in this anchorage.

*LABBASHEDA Anchorage.*

In *Labbasheda Bay* there is little stream of tide, good ground, and sufficient shelter; the depth in the best anchorage from three to six fathoms. Anchor about half a mile eastward of *Red-gap*, and near half a mile from the N. shore.

*Anchorage near FOYN'S ISLAND.*

The best anchorage for large ships, off *Foyn's Island*, is about a mile E. S. E. from *Cabiracoon House*, and S. or S. S. E. from a small island which lies about a mile eastward of that house; on from six to twelve fathoms water. The ground there is good, and the stream of tide not strong.

*Pool of LIMERICK.*

Vessels that draw seven or eight feet water may ride afloat in the *Pool of Limerick*, which is above half a mile below the town: the bottom there is soft mud, and larger vessels need not be afraid to take the ground on it. After half-flood, ships of twelve feet draught of water may get up to the *Pool of Limerick*; but for want of buoys or perches by the way, a pilot will be necessary, at least from *Key Island* near *Bunratty*.

*Anchorage in the River FERGUS.*

In the *Fergus*, vessels may stop in the channel about half a mile, or more, southward of *Inishtagrume Island*, on two fathoms the least water: or they may lie aground in the channel, above *Ing Point*, on soft mud, well sheltered.

*A General Account of MAL BAY.*

## C H A R T X I.

Time of high-water.  
Rise of the tide.  
Direction of the  
stream, and Velocity.  
Mal Bay very danger-  
ous.

In *Mal Bay* it is high-water full and change days at four.

Spring-tides rise eleven feet perpendicular, neap-tide six or seven.

The stream of flood sets in from the south-westward, and ebb from the north-westward: but the motion of the stream between the mouth of the *Shannon*, and the isles of *South Arran*, is scarce sensible.

In *Mal Bay* (under which name we comprehend the coast from the *Shannon* to the isles of *South Arran*) there is no place of safety for ships, when the wind blows hard from the S. W. to the N. W. If they happen to be embayed, in blowing weather, the only places where there is any chance of saving a ship, or the men's lives, are on the N. side of the bay of *Dunmore*, above the castle, about high-water; or opposite to *Mutton Island*, within the ledge of rocks that runs eastward from *Seafeld Point*; or near *Hag's Head* in the bight, on the E. side of *Liskennir Castle*. In each of these places there is some shelter from westerly winds, and sand or gravel to lie aground on.

Rocks



# THE WEST COAST OF IRELAND.

SOUTH ARRAN Isles.—From GULIN HEAD to GALWAY.

## Rocks and Shoals near the SOUTH ARRAN Isles.

On the S. E. side of *Inishfebir Island*, there is a rock above a quarter of a mile from the shore, which dries with spring-tide only. Rocks near Inishfebir Island.

On the N. W. part of *Inishfebir*, in *Foul Sound*, there is a shoal that extends near one-third over, towards *Inishmaan Island*; there are about six feet water on it at low-water. In Foul Sound.

From the N. W. point of *Inishmaan*, a rocky ledge extends northward, near two cables-length, which is the only shoal in *Gregory's Sound*. Ledge at Inishmaan.

On the N. side of the northmost point of *Kilany Bay*, in *Arran Island*, there is a rock above a quarter of a mile from the shore, and a patch of sand between it and the point, both which dry with spring-tide only: on the E. side of these, a rocky ledge extends from the point northwards, near as far off as the rock. Rock, sand, and ledge near Arran.

Off the W. side of *Kilmurvy Bay* in *Arran*, there is a rock above two cables-length from the shore, which dries with spring-tide only. Rock near Kilmurvy.

Between the point of *Onacht*, and the S. end of the *Branach Isles* at the W. end of *Arran*, there are two rocks, one of which dries with spring-tide only, and is near the middle of the channel; the other is nearest *Arran*, and dries about half ebb. Rocks in Branach Sound.

## ARRAN Harbour.

In this harbour it is high-water, full and change days, at  $4\frac{1}{4}$ . Spring-tide rises fifteen feet perpendicular, and neap-tide eight or nine. In the *Bay of Kilany* (as the harbour is called), the ground is clean, and the water on the W. side of *Straw Island* sufficiently deep for large ships; but in that part of the harbour E. and N. E. winds set in a great swell, and it is not likely that the ground will hold sufficiently in hard gales. This harbour therefore is only fit for vessels in the summer-time. Small vessels may anchor in the middle of the bay, on  $2\frac{1}{2}$  fathoms the least water: large vessels must anchor about two cables-length W. from *Straw Island*, on four or five fathoms. The W. side of the entry is shallow about one-third over, toward *Straw Island*, which must be attended to in failing in or out. There is also a ledge extending eastward a cable's-length from *Straw Island*, which must be avoided failing in, or out, from the eastward.

## A Description of the Tides, Rocks, Shoals, Channels, Anchoring-Places, and Harbours, in GALWAY BAY.

### CHART XII.

#### Tides in GALWAY BAY.

#### TIDES.

In the *Bay of Galway*, from *Gulin Head* to the town of *Galway*, it is high-water on the shore, full and change days, at  $4\frac{1}{4}$ . Time of high-water.

Ordinary spring-tides, in this bay, rises twelve feet perpendicular; extraordinary rises fifteen. Neap-tides six or seven. Rise of the tide.

Flood-tide sets in from the westward, and does not run above one mile an hour when strongest, except in narrow channels. Direction of the stream and strength.

#### Rocks along the Coast from GULIN HEAD to GALWAY.

#### ROCKS and SHOALS.

*Bullig* is a rocky shoal, about half a mile S. of *Carrikelra Island*, near *Gulin Head* and about one-third of a mile W. of a small rock, which is always above water: the least water on it is nine feet. *Gulin Head* on, or out to the S. by, that little rock, clears *Bullig* on the S. side. Bullig shoal.

On the S. side of *Gulin Head* about a cable's-length from the shore, there is a small rock that dries about half-ebb. Rock near Gulin Head.

On the S. side of *Lettermullin Island*, about half a mile from the shore, near the middle, there is a rock that dries about half-ebb. Rock near Lettermullin Island.

The *Englisman's Rock* lies off the middle of *Garomna Island*, above half a mile from the shore, and dries about three quarters ebb. To avoid it on the S. side, keep *Gulin Head* in sight by *Live Island*. You are to the eastward of this rock, when you open a sandy patch on the E. side of *Greatman's Bay*. Englisman's Rock.

*Black Rock* lies about three miles westward of *Galway*, and three quarters of a mile S.  $\frac{1}{4}$  W. of *White Cliff*, and dries with spring-tide only. It is cleared on the W. side, while *Knockdulachy* (or *Bara Cliff*) is westward of *Gray Island*. To clear it on the S. side, keep *Hare Island* a ship's-length open of the low-water mark of the S. end of *Mutton Island*. To sail between it and the *White Cliff*, when necessary, keep *Hare Island* on the S. end of *Mutton Island*. Black Rock.

About the middle, between *Kilcorgan Point* and *Mutton Island*, there is a rocky shoal, on both extremities of which there are but sixteen feet at low-water spring-tide; on other parts of it there are eighteen feet the least. At the S. E. end of this shoal, the ruinous house in *Mutton Isle* bears on a white gate in a stone wall, on *Fort Hill*, which is about a mile E. of *Galway*; and the steeple of *Galway* bears on the low-water mark of the W. end of *Mutton Island*, and the *White Cliff* is just shutting in *Barna*. At the W. end of it *Douchusky Castle* bears one-third from *Mutton Island*, and two-thirds from *Hare Island*; *Kilcorgan Point* bears S. by E.  $\frac{1}{4}$  E. The N. side of this shoal is the best channel to *Galway* road for large ships. To sail through the N. channel, keep *Douchusky Castle* in the middle between *Mutton Island* and *Hare Island*, or nearest *Mutton Island*. Shoal between Kilcorgan Point and Mutton Island.

There is a ledge that extends westward, above a cable's-length from the W. side of *Mutton Island*. Ledge at Mutton Island.

*Ilamirelog Rocks* lie about a mile north-westward from *Ardfry Point*: the extremity of them dries only with spring-tide, other parts of them are covered about high-water only. Ilamirelog Rocks.

About a quarter of a mile S. of *Hare Island*, there is a small rock that dries with spring-tide only.

On the S. side of *New Harbour*, near the westmost grove of trees, there is a ledge which extends northward, near a cable's-length: and near the eastmost grove of trees, there is a rock near half a cable's-length from the shore, which is covered only about high-water. To avoid these going into *New Harbour*, keep the middle. Ledges in New Harbour.

There

Rocks



## From GULIN HEAD to GALWAY.

Ledge at Deer Island.  
Rocks N. of Durus  
Point.

There is a ledge that extends eastward, above a quarter of a mile from *Deer Island*.  
There are three small rocks that lie in a line northward of the point of *Durus*, that dry about half-ebb: the northmost of them lies about mid-channel.

ANCHORING-  
PLACES and HAR-  
BOURS.

## Anchorage and Harbours between GULIN HEAD and GALWAY.

## GREATMAN'S BAY Harbour.

Rocks and Shoals in  
Greatman's Bay.

*Greatman's Bay* is good ground, pretty well sheltered, and fit for vessels that draw not above twelve or fourteen feet water.

Small rock near Tra-  
baan Point.

In sailing into this harbour, avoid a small rock, dry about half ebb, which lies near a cable's-length S. of *Trabaan Point*.

Ledge near the mouth.

Within this harbour, near a mile above the mouth, there is a rocky ledge that extends about a cable's-length from the shore, on the E. side; the extremity of which dries at three quarters ebb. To avoid this ledge, keep mid-channel, or nearest the W. side; or keep the W. shoulder (which is remarkable) of the westmost hill in *Arran Island* on *Trabaan Point*.

Sandy Shoal.

About half a mile above this ledge, there is a sandy shoal on the W. side, which extends across the channel, about three-fourths over, leaving a channel of about half a cable's-length wide. The least water on this bank, at low-water, is three feet, which is near the middle of the S. side; on the rest of it there are nine feet for the most part. To sail through this channel about low-water, when you are near the bank, keep half a cable's-length from the eastern shore: or keep the little *Danish Fort* on *Arran* just open of *Trabaan Point*. At half tide there are at least fifteen feet over the end of this shoal. Anchor when the E. end of *Inishvakin Island* bears about E. N. E. and the old fort on *Inishmaan Island* is out by the E. point of the entry, on three, or  $3\frac{1}{2}$  fathoms the least water.

## CASLEH BAY Harbour.

Anchorage in Casleh  
Bay.

*Casleh Bay* is safe anchorage for vessels that draw not above nine or ten feet water. The best anchorage for such vessels is near the head of the bay, on the W. side, on two fathoms; there the ground is good, and shelter sufficient: drop anchor northward of *Carricknalung Rocks*, when *Cuddu Rock* on the E. side of the mouth of the bay is open about a ship's-length of *Carriglas Point*, and the house at the mill bears on *Lettermore Hill*. Ships that draw eleven or twelve feet water, must ride a cable's-length eastward of this place, on  $2\frac{1}{2}$  fathoms at low-water, when the mouth of the harbour is quite open, and *Lettermore Hill* a little open of the house of the mill.

Rocks in Casleh Bay.  
Caninoch Rock.

*Caninoch Rock* lies in the middle of the entry to this bay, and dries with spring-tide only. To avoid it on the W. side, keep *Carriglas Point* on, or a little E. of *Knockaballach Hill*: or keep one-third from the shore on the larboard hand going in: to avoid it on the E. side, keep within two cables-length of *Cuddu Rock*, which is always above water.

Rock off Barraderry  
Point.

Above a quarter of a mile S. W. from *Barraderry Point*, before you enter *Casleh Bay*, there is a small rock, which dries about half-ebb. This must be attended to in sailing out or in from the W.

Ledge on the E. side of  
the entry.

On the E. side of the entry of *Casleh Bay*, about half a mile above *Cuddu Rock*, there is a ledge which extends north-westward, a quarter of a mile from two small islands in the mouth of a creek.

Carricknalung Rocks.

*Carricknalung Rocks* lie along the N. side of *Carriglas Point*. The S. E. end of these rocks has four or five feet the least water on it: the rock at the N. W. end is dry with spring-tide only. To avoid these rocks, keep two-thirds from *Carriglas Point*, and one-third from the point opposite to it; and from thence steer on *Knockaballach Hill* till the house at the mill bears on, or near, the top of *Lettermore Hill*, then drop anchor.

Carrickacleshin Rock.

*Carrickacleshin Rock*, at the head of *Casleh Bay*, is covered about high-water only.

## BALLIVACHAN Bay.

In moderate weather, especially with southerly wind, a vessel may stop almost any where eastward of *Black Head*, within a mile of the shore; particularly in *Ballivachan Bay*, somewhat nearer the E. than to the W. side, on two, or  $2\frac{1}{2}$  fathoms. In sailing along *Finavara Point*, give it a birth of a cable's-length, to avoid a ledge that runs westward from it. Anchor when a castle, which stands near the entry of *Finavara Creek* bears on the S. shoulder of the most tapering hill eastward. If you fail in on the W. side of *Ilantue Rock*, keep within half a mile of it.

## POUNVINISH Harbour.

*Pounvinish* harbour is well sheltered, and good ground, and fit for vessels that draw not above ten feet water, only they cannot get in when it is within two hours of low-water with spring-tide; for at low-water spring-tide, there is only nine feet in the channel along *Pounvinish Point*. In the entry of this harbour, there is a great swell with westerly winds; therefore, when it blows fresh from that quarter, no vessel should attempt to go in before half-flood, nor after half-ebb. Anchor when *Pounvinish Point* shuts in the entry, about two cables-length from that shore, on two or three fathoms the least water.

## GALWAY ROAD and Harbour.

*Galway Road* is good holding-ground; but when the wind is between the S. and the W. S. W. there is a great swell in it, being little sheltered on that quarter. The anchorage for small vessels is on the E. side of *Mutton Island*, about two cables-length from the shore, when the middle of *Mutton Island* is on *Black Head*. Ships that draw above ten or twelve feet, must ride more to the south-eastward, so as to have *Black Head* fairly open of *Mutton Island*, and the steeple of *Galway* bearing N. Vessels that draw ten or twelve feet water, may go into the harbour of *Galway* about high-water. Take the last of the flood; sail in between the two perches, and lie between the two kays.

## NEW Harbour.

On the N. side of *New Harbour*, there is a small bight in which vessels may lie aground on soft mud, and in better shelter than in any other part of this creek. In this bight there are five or six feet at low-water. This place is more quiet and safe for small vessels to wait a wind in, than *Galway Road* is. In sailing into this harbour, avoid a rock about a quarter of a mile S. of *Hare Island*, which dries with spring-tide only; and *Ilanirelog Ledge* off *Ardfry Point*, and the rock near the S. side of the entry, all taken notice of before.

A Description



# THE WEST COAST OF IRELAND.

From SOUTH ARRAN to CLAGGAN BAY.

## A Description of the Tides, Rocks, Shoals, Anchoring-places, and Harbours, between SOUTH ARRAN ISLAND and CLAGGAN BAY.

### CHART XIII.

#### Tides between SOUTH ARRAN and CLAGGAN BAY.

TIDES.

Between *South Arran* Isles, and *Claggan Bay*, it is high-water full and change days at  $4\frac{1}{2}$ .  
 Ordinary spring-tides rise twelve feet perpendicular; neap-tides rise six or seven; extraordinary spring-tides rise fifteen or sixteen feet.  
 Flood-tide, on this part of the coast, sets in from the southward; and, off the coast, runs not above  $1\frac{1}{2}$  mile an hour when strongest.

Time of high-water.  
 Rise of the tide.

Direction and Velocity  
 of the stream,

#### Rocks and Shoals from SOUTH ARRAN to CLAGGAN BAY.

ROCKS and SHOALS.

There are an immense number of rocks and shoals on this part of the coast: such of them as lie in, or near the harbours, will be described with them; those that lie any considerable distance from the shores are as follow:

The *Skird Rocks* lie off *Kilkerran Bay*, N. by W. from *South Arran*, and about five miles W. S. W. from *Cruanacarra Island*: they are the most remarkable rocks on this part of the coast, and serve in some measure to point out the neighbouring harbours: several of whom are always above water: but the westmost is the largest and most remarkable. The E. part of them consists of one rock that dries about half-tide, one that dries with spring-tide only, and two shoals discoverable by the breakers.

The Skirds.

About half a mile northward of *Carrikamachin Isles*, there is a rock that dries with spring-tides only: on the S. end of these isles, there is a shoal discoverable by the breakers: and near half a mile eastward of them, there is a small rock, whose top is always above water.

Rocks near Carrikamachin Isles.

*Tonyall* is a small shoal that lies about a mile and a half S. W. by W. from *Cruanacarra Island*; the least water on it is five feet. A leading mark to it is, the westmost point of *Cruanacarra Island*, on the top of *Cashil Hill*, which is at the head of *Bitterbui* harbour. Therefore, to avoid it on the E. side, keep *Cruanacarra Island* on *Cashil*; to avoid it on the W. side, keep *Cashil* open to the W. of *Cruanacarra*.

Tonyall Rock.

The *Bellows Rock* lies about  $2\frac{1}{2}$  miles W. N. W. from *Cruanacarra Island*. It is dry at low-water only, but is always to be perceived by the sea breaking on it.

The Bellows Rock.

About a mile and a half eastward of the *Bellows*, there is a shoal which is often to be distinguished by the breakers.

Shoal eastward of Bellows Rock.

*Carrikaskilly Rock* lies about a mile S. of *Ilanora Island*, and is covered at high-water spring-tide only.

Carrikaskilly Rock.

*Carrikmurvy Rock* is always above water. Near the S. side of it there is a small rock that dries about low-water.

Carrikmurvy Rock.

Above half a mile E. from the N. end of the two *Ilanacruach Islands*, there is a small rock which dries with spring-tide only. It lies nearer *Ilanacruach* than to *Inishblaken*; and bears N. E. by N. from the Sound between the *Ilanacruach Islands*.

Rock E. of Ilanacruach.

Between *Slyne Head* and *Ilanora Island*, there are several shoals that are to be perceived by the breakers in blowing weather.

Shoals E. of Slyne Head.

*Carrikhouly Rock* lies about a mile W. S. W. from *Gourteen Point*, and is covered about high-water only.

Carrikhouly Rock.

There are many rocks and shoals near the mouth of *Ardbear* harbour, which will be better known by the draught, than by a description. We refer to the chart for them, and shall shew how they are to be avoided in the account of that harbour.

Other rocks and shoals near Ardhear, referred to the draught.

#### CASHEEN Bay.

HARBOURS.

In *Casheen Bay*, there is good ground on the E. side of *Dyinish Island*, sufficient shelter, and a sufficient depth of water for large ships. There is a shoal that lies S. W. from *Dyinish*, above half a mile, on which the least water is eighteen feet: large ships sailing in, about low-water, should attend to it. Anchor on the E. side of *Dyinish*; the white sand near the point of that island, bearing W. about two cables-length from the shore, on five fathoms water.

#### KILKERRAN Harbour.

In this harbour there is good anchorage for vessels of any burden, on the E. side of *Kilkerran Point*, a cable's-length, or more, from the Point. Anchor on six or seven fathoms, when the Point just bears on *Gulin Head*. You may sail in on any side of *Ilanbonna Island*, but must give it a birth of about a cable's-length. Avoid the bank of sand that lies along the coast eastward from *Ardmore Point*, by steering from *Ilanbonna* right on the Point of *Kilkerran*; or rather between it and the little island that is about a mile westward of it, so as to avoid also a small rock dry about half-ebb, near the rocks on the starboard hand that are always above water.

#### BITTERBUI Harbour.

*Bitterbui Bay* is capacious, well-sheltered, good ground, and capable of the largest ships. Vessels may ride on the E. side of *Ilanochty*, on from four to eight fathoms water; or any where above that near the middle of the bay. The shallow parts of this bay to be avoided, are the *Oyster Bank* at the N. E. end, and an ouzy shallow along the S. side, extending near two cables-length from that shore, on which there is not above one fathom with low spring-tide.

In sailing into this harbour, avoid *Tonyal Shoal* described before; and a rock that dries with spring-tide only, about half a mile W. of *Massa Point*; and *Smith's Rock*, which lies about a quarter of a mile N. W. from *Frubilan Island*.

Rocks near Bitterbui.

The spring-tide rock off *Massa Point*, lies W. by S.  $\frac{1}{2}$  S. from *Massa Point*, and near half between it and the W. end of *Cruanacarra Island*. To avoid it on the W. side, keep *Cashil Hill* open of *Massa Point*.

Rock near Massa Point.

*Smith's Rock* is very small, and lies N. N. W. from the S. end of *Frubilan Island*; the least water on it is ten feet. To avoid it on the E. side, keep about a cable's-length from *Frubilan*; or keep the E. end of

Smith's Rock.



## From South ARRAN to CLAGGAN BAY, and ACHIL HEAD.

*Inishtreb Island*, (the small island in the mouth of *Birterbui Bay*) on, or a little open of the top of *Casbil-Hill*. To avoid it on the W. side, keep the middle between *Inishlaklin Island*, and *Frubilan Island*. You are abreast of it when the W. end of *Inishlaklin* bears on the lower part of the W. end of *Urrybeg Hill*, at a remarkable hummock.

## ROUNDSTONE Bay.

*Roundstone Bay* is fit for small vessels only: they may ride safe in a bight a little above the storehouse, about half a cable's-length from the shore, on seven or eight feet the least water: or they may lie aground a little farther from the shore on mud, without any damage. Large vessels, that do not like to take the ground, may ride in the summer-time a little above the southmost point of *Inishnee Island*, on four or five fathoms water. In sailing into *Roundstone Bay*, avoid a rock that dries with spring-tide only, and lies E. N. E. about a quarter of a mile from the northmost point of *Inishlaklin Island*.

Rock near Inishlaklin.

## BUNOWEN Bay.

In the summer-time, or in moderate weather, small vessels may ride on the E. side of the W. point of *Bunowen Bay*, near a cable's-length from the shore, on two, or  $2\frac{1}{2}$  fathoms water. The ground holds well. Shut in *Carrikaskilty Rock*, then drop anchor. In sailing into this anchorage, between *Carrikaskilty Rock* and *Carrikirk Island*, give that island a birth to avoid a shoal, which is about two cable's-length northward of the rock near *Carrikirk*, which is always above water, on which there are often breakers: and keep about a cable's-length, or half a cable's-length, from the three rocks, always above water, that lie between *Ilanora Island* and *Fox Island*. Avoid likewise a small rock, which lies about a cable's-length S. of the W. point of the bay, which dries with spring-tide only.

## ARDBEAR Harbour.

This harbour is well sheltered, the ground good, and the water in the anchorage sufficient for the largest ships; but in the entry there is no more than  $2\frac{1}{2}$  fathoms with low spring-tide; so that a very large ship cannot get in at that time. Anchor about a quarter of a mile eastward of the entry, above a cable's-length from the S. side, on six or seven fathoms water; or a little higher up the harbour on five fathoms.

Shoal just within the mouth of this harbour.

Just within the narrow entry of this harbour, on the N. side, there is a sand-bank which extends south-eastward about a cable's-length; the least water on it is three feet. This shoal is avoided by keeping nearest the S. side.

Dulick Rock.

*Dulick Rock* lies about half a mile W. N. W. from a clay-cliff that is on the E. side of the entry of *Ardbear*: the E. end of this rock is covered only with spring-tide, and therefore may always be seen, either dry, or by a breaker on it: the W. and N. W. parts of it dry at half ebb; and are avoided by keeping above a cable's-length from the E. end of the rock.

To come up with the entry of *Ardbear* harbour from the south, steer from *Slyne Head* N. E. or N. E. by E. till you are about a league from *Crua Island* (which rises into a remarkable tapering hill), when you will see *Carrikarone Rocks*, which lie on the S. side of *Tarbut Island*, and are always above water; steer for these rocks, and take them on the larboard-hand, at the distance of from a cable's-length to half a mile; then steer eastward for the S. side of *Ardmore Head* (which is a remarkable clay cliff) till you make the entrance of *Ardbear*; then sail in through the middle of it.

*Claggan Bay*, and the rocks and shoals near it, are described in the next map.

## A Description of the Tides, Rocks, Shoals, Channels, Anchoring-Places, and Harbours, between SLYNE HEAD and ACHIL HEAD.

## CHART XIV.

## TIDES.

## Tides between SLYNE HEAD and ACHIL HEAD.

Time of high-water.

Between *Slyne Head* and *Achil Head*, it is high-water on the shore at  $4\frac{1}{2}$  full and change days.

Rise of the tide.

Spring-tides on this part of the coast rise twelve feet perpendicular; neap-tides six or seven.

Direction of the stream.

Flood-tide, along the coast, sets northward; and ebb-tide southward. The stream of flood in *Achil Sound* sets in, both in the S. and N. entries, about the same time, and meet a little southward of the *Old Salt Pans*.

Velocity of the stream.

The stream along the coast does not run above two miles an hour when strongest; nor between the islands; except in the two entries of *Achil Sound*, where it runs about four miles an hour. In the channel between *Clare* and *Ruinabà Point*, it runs about one mile an hour when strongest.

## ROCKS and SHOALS.

## Rocks and Shoals from CRUA ISLAND to ACHIL ISLAND, and to NEWPORT-PRAT ISLANDS.

Rock near Crua Island.

On the north side of *Crua Island*, there is a small rock about a cable's-length from the shore, which dries about half ebb.

Shoal near High Island.

Near the S. end of *High Island*, there is a remarkable rock always above water: along the E. side of that rock, there is a shoal extending N. and S. above a quarter of a mile, on which there is often a rough breaking sea in blowing weather: but, by all accounts, and its breaking only in blowing weather, it seems to have a sufficient depth of water over it. It is avoided by keeping half a mile from the S. E. point of *High Island*.

Shoal near Friar Island.

There is a shoal near the N. end of *Friar Island*, about a cable's-length from the shore, on which the sea breaks in blowing weather.

Rock on E. side of that island.

On the E. side of *Friar Island*, there is a small rock which dries about half ebb, and lies a quarter of a mile from the island.

Cuddu Rock.

*Cuddu Rock* lies about a mile E. of *Friar Island*, and is always above water. There is a rock on each side of it, about a cable's-length from it, which dry about half ebb.

Between



## FROM SLYNE HEAD TO ACHIL HEAD.

Between *Furunach Rock*, which is always above water, and *Ruilan Point* at *Claggan Bay*, there are two rocks that dry with spring-tide only. Rocks E. of Furunach Rock.

There is a shoal which lies about two cables-length N. by W. from *Ruilan Point* at *Claggan Bay*, on which the least water is three feet; but on the greatest part of it there are nine feet. It is avoided on the N. side, by keeping *Furunach Rock* open of the S. end of *Friar Island*: it is avoided on the E. side failing in, or out of *Claggan Bay*, when the sandy cliffs near *Ruilan* bear S. Ruilan Shoal.

*Carrikmahogga Rock* lies about one-third from *Lyn Island*, and two-thirds from the *Point of Claggan*, and dries at four hours of ebb. To avoid it on the S. and E. sides, keep *Liabi Rock* E. by N. or on *Ruinabà Hill*; which is a remarkable tapering hill, near *Ruinabà Point*, opposite to *Clare Island*. At that distance it looks like an island. Carrikmahogga Rock.

About a cable's-length from the S. E. point of *Lyn Island*, there is a rock that dries about half-ebb. Rock near Lyn Island.

There is a rock above a cable's-length from the E. end of *Davilan*, which dries about half-ebb. Rock near Davilan.

There is a rock about half a mile W. of *Inishbruin Island*, which dries about half-ebb. Rock near Inishbruin Island.

*Ilaananimèb Island* is shallow about a cable's-length from it almost quite round. Ledge near Ilaananimèb.

Between *Ilaandachreen Islands* and *Cuddu Rocks*, off the *Kilery Harbour*, there is a small rock which dries only with extraordinary low tides. It lies about three quarters of a mile N. E. from *Ilaandachreen*. To sail between these islands and it, keep within two cables-length of these islands: or keep *Ilaananimèb Island* on the W. end of *Inishbofin Island*. To sail on the N. side of this rock, keep about a quarter of the N. end of *Davilan* on the northmost hill of *Bofin Island*, which appears the highest. You are eastward of this rock when the E. end of *Ilaandachreen* bears on the top of *Rinveel Hill*. Rock of Ilaandachreen.

*Frechil* is a small island, which lies about a mile and a half N. N. E. from *Cuddu Rocks*: this island is almost surrounded with rocks; some of which lie above half a mile from it on the W. side, and dry partly with spring-tide only, and partly about half-ebb; and three of the eastmost are always above water. These rocks must be avoided on the W. side, by keeping about a mile off *Frechil*: or by keeping *Inishbruin Island* on the top of *Claggan Hill*, which appears with a remarkable sharp top. Rocks near Frechil Island.

Between the mouth of *Kilery* and *Ruinabà Point*, there are several rocks that lie along the coast; some of them three quarters of a mile off the shore; part of them are dry with spring-tide only, but the greatest part with half-ebb. That rock which is next *Ruinabà*, requires a more particular description, because it is more in the way of shipping. Rocks between the Kilery and Ruinabà Point.

About a mile W. by N. of *Ruinabà Point*; or one-third from that point, and two-thirds from *Clare Island*, there is a rock that dries with spring-tide only: to avoid it, keep the middle; or nearer to *Clare* than to *Ruinabà*. Rock off Ruinabà Point.

There is a ledge, and two small rocks at the N. side of it; which extends about two cables-length westward of *Ruinabà Point*. Ledge at Ruinabà.

*Carrikadillisk Rocks* lie two miles westward of *Duorinsha Island*, and about a mile from the S. side of *Newport Bay*. The largest dries before half-ebb, and another dries with spring-tide only; and there are several shoals near them that may be perceived by the breakers. Carrikadillisk Rocks.

On the S. side of *Inishark Island*, between the bay and the small islands, there are several shoals that discover themselves in blowing weather by the breakers. Shoals near Inishark Island.

The east side of the channel, between *Inishark* and *Inishbofin*, is all shallow; the sea breaking on it often in the fairest weather. The *Inishark* side is sufficiently deep; but there is commonly a great swell over all the Sound. Shoal between Inishark Island, and Inishbofin Island.

About half a mile E. by N. from the north-east point of *Clare*, there is a small rock that dries before half-ebb, which may be distinguished often at high-water by the swell, or breakers, on it. Rock near Clare Island.

*Dufaghty Rock* lies above half a mile S. from *Moitog Head*, at *Achil Head*, and dries about half-ebb. Dufaghty Rock.

*Anchoring-places and Harbours between SLYNE HEAD and ACHIL HEAD; of which ARDBEAR Harbour has been described already.* ANCHORING-PLACES and HARBOURS.

## CLAGGAN Bay.

This bay is of easy access; all clean good-holding ground, and pretty well sheltered; with depth of water sufficient for the largest ships. In failing in here, avoid the shoal about a quarter of a mile from *Ruilan Point*, which is above described, and anchor near half up the bay, a little nearer the E. than to the W. side, on from six to  $3\frac{1}{2}$  fathoms at low-water.

## INISHBOFIN Harbour.

This harbour is fit for small vessels only, that draw not above ten feet water. It lies on the S. side of *Inishbofin Island*, is well sheltered, and the ground good.

Near the middle of the entry, there is a rock that dries with spring-tide only. It lies westward of *Gun Rock*; which is the remarkable rock near the W. side of *Fort Island*. To avoid this rock, keep nearer to the E. side than to the W. side of the entry. This rock, and three small shoals near it, on each of which the least water is three feet, render it not safe for one that is not well acquainted, to go into this harbour before half-flood. If one is under any necessity of going in, about low-water, he must keep about a ship's-length from the W. end of *Gun Rock* till he is past it, to avoid one of these shoals, which lies about thirty fathoms N. W. by W. from the N. W. point of *Gun Rock*. Another of these shoals lies half a cable's-length W. by S. from the W. point of *Gun Rock*: the third lies about half a cable S. W. from the rock in the middle, mentioned before, that dries with spring-tide only. Rocks in the entry.

On the S. side of *Gun Rocks*, where they are low, there is a shoal that lies S. W. about half a cable off, on which the least water is eight feet. Shoal on the S. side of Gun Rocks.

The best anchorage is off the W. side of the *Sandy Bay*, next *Fort Island*, somewhat nearer the S. than to the N. side of the harbour, on  $2\frac{1}{2}$  fathoms at low-water. Anchorage.

There is a spit of sand within this harbour, which extends from the N. side about one-third over. Between the extremity of this spit, and the W. side of the *Sandy Bay* next *Fort Island*, is the deepest water and the best anchorage. Spit of sand near the anchorage.

## BALLINAKIEL Harbour.

*Ballinakiel* harbour is well-sheltered, good ground, and sufficiently deep for the largest ships. The entry to it is along the N. side of *Frushilan*; and the anchorage near the E. end of that island; or south-eastward of the

two



## From SLYNE HEAD to ACHIL HEAD.

Rocks near the entry  
and anchorage of Bal-  
linakiel.

Carriknalunga Rock.

Anchorage near Fru-  
chilan.

Anchorage near Carri-  
gahaglassa.

Anchorage E. of the  
Point of Rofs.

Shoal on the N. side of  
Rofs.

Rocks in the way to  
the Kilerys.

Anchorage near Inish-  
tirk Island.

Anchorage at Clare  
Island.

On the E. side of Clare.

To sail into Achil  
Hole.

Inishgowla harbour.

To sail into Inish-  
gowla

Entry distinguished.

Ilaan-more harbour.

two small islands, or rocks, called *Carrigabaglassa*; or eastward of the *Point of Rofs*.

In sailing into this harbour, avoid a small rock which lies about a cable's-length N. W. from the W. end of *Fruchilan*, which dries about half-ebb: also a rock which lies about a cable's-length westward of the W. end of *Bradilan*, which dries at low-water, by keeping within a cable's-length of *Fruchilan*: also avoid a rock that dries with spring-tide only, called *Carriknalunga*, which lies about a quarter of a mile eastward of *Fruchilan*, and a breast of a remarkable cliff on the N. side of the entry: to avoid it on the S. side, keep the *Black Rock* next the W. end of *Bradilan Island* open a sail's-breadth of the N. end of *Davilan Island*.

The anchorage near the E. end of *Fruchilan*, is when the N. point of that island bears on the highest part of *Inishbruin*, and the S. point of it just shutting in with *Carrigeen Island* (which is near the W. end of *Fruchilan*), about a cable's-length and a half from *Fruchilan*; on eight or nine fathoms water: this is the best place for large ships.

The anchorage near *Carrigabaglassa Islands* is, when the westmost of these two bears N. W. by N. and *Rofs Point* S. by W. then drop anchor. Eastward from this anchorage, near two cable's-length, there are rocks partly dry about half-tide, and partly at low-water spring-tide only.

To anchor on the E. side of *Rofs Point*; when the Point bears on the westmost of the two *Carrigabaglassa Islands*, a cable's-length from the shore, on five or six fathoms water, then drop anchor; and ride with no more than half a cable; for the channel is narrow, and the stream of tide in it runs about two miles an hour when strongest.

There is a sandy shoal, which extends about a cable's-length northwards along the N. side of the *Point of Rofs*, and half a cable eastward along the E. side of it: to avoid it, keep the N. end of *Inishbosfin* out two ship's-length by the N. end of *Fruchilan*: or keep the S. end of *Davilan Island* just in by the S. end of the westmost *Carrigabaglassa Rock*.

## The KILERY Harbour.

The *Kilery* is capacious, well-sheltered, and good ground; fit for ships of any size: there is good anchorage in any part of it. The widest part, and most moderate depth, is about two miles up the harbour. When the wind blows fresh from the easterly quarter, this harbour is subject to violent squalls of wind that come down from *Muilrea Mountain*, which is on the E. side of it.

The rocks to be avoided, in sailing toward this harbour, are the spring-tide rock between *Ilaandabreen Islands* and *Cuddu Rocks*, already described; and another rock half between *Ilaandabreen* and the mouth of the *Kilery*, which dries with spring-tide only; it lies near half a mile N. of a rock which is always above water, and is avoided by keeping *Ilaandabreen* W. or W. by N.

## SALROKE Harbour.

*Salroke* harbour is sufficiently sheltered, good ground, and the depth fit for large ships; but, being narrow, a ship must have a leading wind out and in, and cannot ride with above half a cable; on which account it is only fit for small vessels. The rocks near the entry are never quite covered, and the depth sufficient on either side of them. Anchor near the head of the bay, on four fathoms at low-water.

In the bay on the E. end of *Inishbirk Island*, a vessel may stop on five or six fathoms water, and ride sheltered from N. and W. winds.

On the E. end of *Clare Island*, in the Bay at the Castle, a vessel may stop a tide on clean sand, if it does not blow hard, on four fathoms water. Drop anchor when the castle bears W.  $\frac{1}{2}$  N. and the cliff next the castle S. W. by W. about half a cable's-length from that Point.

Also in the Bay, on the E. side of *Clare*, a vessel may stop in moderate weather, on twelve or fourteen fathoms, about half a mile from the shore.

## ACHIL HOLE Harbour.

*Achil Hole* is the channel between *Achil Island* and *Achil-beg Island*. In this place a vessel that draws but ten or twelve feet water, may ride safe all weathers. Drop one anchor nearest the *Achil-beg* side, in the edge of a visible stream of tide, when the top of *Cruach-patrick Mountain* bears on the extremity of the grafs of *Corraan Point*, on four or six fathoms water: lay the other anchor north-westward on the edge of the sand that dries at low-water.

There is a rocky shoal that extends southward, near half a mile from the Point of *Corraan* next *Achil-beg*; the least water on which is six feet: the channel into *Achil Hole* is between this shoal and *Achil-beg*. It is always to be distinguished by the roughness of the sea on it, especially with W. and S. W. winds. In coming into this harbour, it is necessary to have half-flood; for the stream does not set in till about an hour and a half after low-water on the shore. Keep about a cable's-length from the E. side of *Achil-beg*, to avoid the fore-mentioned shoal, till you come to the narrow entry; then keep a little nearer to the Point of *Corraan* than to the Point of *Achil-beg*, to avoid a spring-tide rock that lies within the entry, nearest the *Achil-beg* side, and anchor as above directed. The stream of tide in the anchorage runs about three miles an hour with spring-tide when strongest.

## Harbours within the NEWPORT ISLANDS.

There are several places among these islands, where ships of any burthen may ride well-sheltered, on good ground, and a sufficient depth of water; we shall mention only the principal, or most accessible of them.

*Inishgowla* harbour is on the E. side of *Inishgowla Island*. A vessel may anchor any where between that island and *Inishbirk Island*, on water from three to eight fathoms deep, and good ground. A large ship coming in here requires half-tide; because, about a mile westward of *Inishu Island*, there are some parts only  $2\frac{1}{2}$ , or two fathoms deep at low spring-tide. Sail in along the N. sides of *Inishu* and *Inishgowla*, and keep within a cable's-length of *Inishgowla*, to avoid a rock covered at high-water only, which lies near the small island, next N. of *Inishgowla*.

The entry of this harbour may be distinguished at several miles distance, by the appearance and situation of *Inishu Island*; for it lies near the middle of the Bay, and on the N. side of the largest vacancy, or opening, between the islands; and the W. end of it rises into a remarkable clay cliff, higher than in the other islands. This is the safest harbour, for one that is a stranger, to pursue.

*Ilaan-more* harbour lies near two miles southward of *Inishu*, is quite well-sheltered, and has five fathoms water and good-holding ground on the S. side of the harbour: the narrow beach, that shelters the W. side, is always above water, except a small part in the middle which is covered only at high-water. The channel is along



## From ACHIL HEAD to the STAGS of BROAD-HAVEN.

along this beach; keep within a cable's-length of it; to avoid a shoal on which one fathom is the least water, that lies about a quarter of a mile westward of the S. end of the beach.

The channel.  
Shoal near it.

*Inish-lyre* harbour lies about three quarters of a mile eastward of *Ilaanmore*, on the E. side of *Inish-lyre Island*, and is quite well-sheltered, and the ground good; but the depth only  $2\frac{1}{2}$ , or three fathoms, at low spring-tide. The channel into it is the same as into *Ilaanmore*, about a cable's-length from the beachy-neck. Anchor off the N. point of the bay, when it bears W. by N. about  $1\frac{1}{2}$  cable's-length, on three fathoms the least water.

*Inish-lyre* harbour.

*Row Island* harbour is on the E. side of that island, in a small bight which breaks off the sea: the ground is good, and the water sufficient for any ship.

*Row Island* harbour.

In sailing toward this and the other harbours, on the N. side of the bay of *Newport Prat*, *Row Island* should be first made, which may be known by two small Turrets, or Kerns, on it, which serve as land-marks for avoiding *Laarbaan Rock*. This rock lies about a mile westward of *Row Island*, and dries with spring-tide only: it is avoided both on the N. and S. sides, by keeping these Kerns a little open of each other.

*Laarbaan Rock*.

There is a shoal, on which the least water is two fathoms, that lies about a cable's-length W. by S. from the W. end of *Row Island*, and is avoided by keeping about two cables-length from that end of the island.

Shoal near *Row Island*.

About half a mile S. from the E. end of *Row Island*, there is a rocky shoal, on which the least water is one fathom: and a rock about a quarter of a mile S. S. E. of that shoal, which dries with spring-tide only. Eastward of this last rock, above half a mile, there is a rock which dries about half-ebb; and one above half a mile S. E. from it, which dries with spring-tide only.

Shoal S. of *Row Island*.  
Rocks S. E. of it.

*Rofs-trunk* harbour is about three miles eastward of *Row Island*. It is well-sheltered, good ground, and capable of containing a great number of vessels that draw not above ten feet water. The channel to this harbour is on the S. side of *Laarbaan Rock*, mentioned above; and about a cable's-length from the S. side of *Row Island*, and from thence nearly E. between a straight row of Islands more easy to be distinguished by the eye, or on the chart, than to be explained by words.

*Rofs-trunk* harbour.

About half a mile southward of *Rofs-trunk* harbour, there is a place well-sheltered, good ground, and capable of containing a great many of the largest ships. The water there is from two to six fathoms, and the channel is along the S. sides of *Laarbaan Rock*, *Row Island*, and the island next S. of *Rofs-trunk*.

Harbour S. of *Rofs-trunk*.

Small vessels may go up to the kay at *Newport Prat* after half-flood: and though they ground by the way, they can receive no damage; for the ground is soft mud for the most part.

*Newport-Prat*.

## A Description of the Tides, Rocks, Shoals, Channels, Anchoring-Places, and Harbours, between ACHIL HEAD and BROAD-HAVEN.

### CHART XV.

#### Tides between ACHIL HEAD and BROAD-HAVEN.

#### TIDES.

From *Achil Head* to *Broad-haven* it is high-water on the shore, full and change days, at five.

Time of high-water.

Spring-tides on this part of the coast rise twelve feet perpendicular; neap-tides six or seven.

Rise of the tide.

The stream of flood, off the coast, comes from the south-westward, and the stream of ebb from the northward; and does not run above one mile an hour, when strongest.

Direction and strength of the stream.

There are no shoals, nor dangerous rocks off this part of the coast. *Black Rock*, and the *Stags of Broad-haven*, are high rocks, and very remarkable.

Rocks.

At the south-east end of *N. Inishkea Island*, there is a ledge of rocks extending near a mile eastward; the extremity of which dries about low-water, and the middle about half-ebb. To avoid this ledge, keep *Achil Head* a ship's-length out by the E. end of *Davilan Island*.

Rocks near *Inishkea*.

*Duffer Rock*, near *Inishkerach Island*, is always above water. About half a mile southward from it, there is a small rock that dries about half-ebb.

Rock near *Duffer*.

About half between *Inishkerach* and the main, there is a rock that dries before half-ebb.

Rock E. of *Inishkerach*.

W. of *Inishglorre Island*, about half a mile, there is a rock that dries about half-ebb.

Rock W. of *Inishglorre*.

About half a mile W. of the *Point of Annach*, there is a shoal on which the sea breaks often.

Shoal near *Annach*.

#### BLACK-SOD Bay.

#### HARBOURS.

*Black-sod Bay* is pretty well sheltered, the ground clean in most parts, and the water sufficiently deep for large ships: but the ground being a hard sand, it is not thought that it will hold well in hard gales from the W. or S. W. especially in the winter-time, when these winds set in a great swell. The best anchorage is on the W. side of the Bay, about a quarter of a mile southward of *Barnach Isle*, on  $4\frac{1}{2}$ , or five fathoms. Vessels that draw not above ten feet water, may ride farther up that Bay in  $2\frac{1}{2}$ , or two fathoms.

On the N. side of the peninsula of *Claggan*, there is good anchorage, as it is not so much exposed to the swell of the sea as the open bay; but a ship that draws ten or twelve feet water, must go up there about half-tide; for, along the W. side of *Claggan Point*, there is no more than nine feet at low spring-tide. The rocks on the N. side of this anchorage are dry at half-ebb. To sail to this anchorage, keep the *House of Court* (a remarkable old house, within the *Mullet*, about two miles from the mouth of the Bay) out a ship's-length or two by the point of *Claggan*, till *Tristy Hill* bears on the middle of the low sandy point of *Claggan*, then drop anchor, on  $4\frac{1}{2}$ , or five fathoms water, which is above a cable's-length from the shore.

Anchorage near *Claggan Point*.

#### TULLACHAN Harbour.

*Tullachan* is fit for small vessels only; that draw not above nine or ten feet water; and these must go in with the latter end of the flood; for it dries from the E. side of this Bay three-fourths over at low-water, and on the edge of the sand there is commonly a breaking sea. Near the middle of the channel: about a mile up, there is a rock that dries with spring-tide only; and on the W. side of the channel, two rocky ledges extend from the shore about a cable's-length. A small vessel may ride a-boat off the point of *Tullachanbaan*, about a cable's-length from the shore, on ten or twelve feet the least water. But the safest and smoothest part of this

harbour



## THE WEST COAST OF IRELAND.

## From ACHIL to BROAD-HAVEN, to KILALLA.

harbour is a quarter of a mile farther up, near the *Point of Tullachbandub*, where six feet is the least water; but soft sandy ground, and no swell, and where a vessel can receive no damage by touching the ground.

## INISHKEA Anchorage.

In the summer-time, or in moderate weather, a vessel may ride safe between the two *Inishkea Islands*, about a cable and a half from the N. side of *Rusheen Island*, on three or four fathoms water. In coming into this anchorage, from the S. avoid a ledge that extends north-eastward from *Rusheen* about a cable's-length, by keeping the W. end of *Davilan Island* on *Achil Head*; or on the top of the hill above the Head. The ground in this anchorage is said to hold well.

## BROADHAVEN Harbour.

In this harbour the proper anchorage is well-sheltered, the ground good, and the water of a sufficient depth for any ship; but there is not room for above two large ships, or for more than three or four that draw ten or twelve feet, to ride in good shelter from northerly winds: and these must ride with no more than half a cable to the eastward and westward. This anchorage is between two spits of land; one of which runs out from *Rintagil Point* on the W. side, the other from *Rinisbunnach Point* on the E. side. To sail into this anchorage, between these spits of land, keep the *Salt-pan House* (a small house on the shore at the head of the Bay) a sail's-breadth open to the W. of the W. end of *Stemore Hill* in *Achil Island* (it seems the largest hill there). Or keep the extremity of the Point next *Glingad Hill*, on the sharp top of *Binwi Hill*, till a hut near *Rintagil Point* bears on *Stemore Hill* in the Mullet, about two miles N. N. W. then drop anchor, if it is a large ship.

If the ship draws not above twelve feet water, you may sail northward a little farther, until the *Salt-pan* bears a sail's-breadth on *Stemore Hill* in *Achil*: or till *Knockanalyna Point* is just on *Kid Island*. Small vessels, about half-tide, may go farther up, either northward or eastward, and lie very safe on soft sand, with three or four feet water under them at low-water.

A vessel may stop a tide on the S. side of *Knockanalyna Point*, on three fathoms water, about two cables-length from the shore.

## A Description of the Tides, Rocks, Shoals, Channels, Anchoring-Places, and Harbours, between BROADHAVEN and KILALLA.

## C H A R T XVI.

## TIDES.

## Tides between BROADHAVEN and KILALLA.

- Time of high-water. On this part of the coast it is high-water on the full and change days of the moon, at five.
- Rise of the tide. Ordinary spring-tides rise twelve feet perpendicular; neap-tides rise seven.
- Direction and velocity of the stream. The stream of flood comes in from the westward; and runs not one mile an hour when strongest.
- ROCKS and SHOALS. From *Broad-haven* to *Kilalla*, there are no shoals, or rocks, but the *Stags*, which are very remarkable, till you come to *Kilalla Bay*.
- Carrikfadrik Rocks. *Carrikfadrik* are three rocks that lie on the W. side of the *Bay of Kilalla*, off the *Point of Rofs*; the eastmost of which dries at four hours ebb, and the westmost at two hours ebb: the shoal between the eastmost and *Rofs Point*, dries with extraordinary low tides only. To avoid these rocks along the N. E. side, keep the highest part of *Kilcummin Head* N. N. W. or N. by W.  $\frac{1}{4}$  W. or keep the westmost part of *Kilcummin Head* three or four ship's-length out by the highest part of that Head. When *Relakin Head* is shutting in by *Kilcummin Head*, you are a mile northward of the *Carrikfadrik Rocks*. To avoid these rocks on the S. E. side, keep the steeple of *Kilalla* on the white Point that appears nearest the town (it is called *Inishbirnaan*), when it will also bear on a remarkable hill, which tapers at the E. end, and is next W. of *Nefin Hill*.
- Carrikaslum Rocks. *Carrikaslum* is a ledge of large stones, on the W. side of the mouth of the channel, that leads to *Kilalla* harbour; this ledge begins to dry a little after half-ebb. To sail over the bar of *Kilalla*, and avoid this ledge, keep the *Old Storehouse* (which stands on the shore, a quarter of a mile northward of the town) just open to the W. of the steeple of *Kilalla*: or keep the steeple a handspike westward of the top of the westmost of two little round hills, next W. of *Nefin Hill*, except the tapering hill mentioned in the last paragraph. This mark also leads through the channel, till it begins to turn south-eastward toward the anchorage, at the W. end of *Birterach Island*.
- The best part in *Kilalla Bay* to stop a tide in, is on the E. side of *Rofs Point*, above two cables-length from the shore, on from three to six fathoms water.

## HARBOURS.

## RATHFRAN Harbour.

This harbour being dry at low-water, is fit for small vessels only, which can take ground easily, but is quite well-sheltered by the bar, and safe from any swell of the sea.

At the bar, in the middle of the channel, there is a small rock which dries with spring-tide only: so that a vessel that draws nine or ten feet water must not go into this harbour till about high-water with spring-tide. The channel is about half a cable's-length from the shore, on the starboard-hand going in. As the sea is smoother in this channel, in blowing weather, than on the bar of *Kilalla*, some vessels that could not ride in the bay, have chosen to run for *Rathfran* harbour, rather than for *Kilalla*; and have got over the bar, and lain safe till the weather moderated.

## KILALLA Harbour.

In the harbour of *Kilalla*, vessels that draw eight or nine feet water may ride a-float in good shelter, and safe all weathers. A ship that draws twelve feet, may get into this anchorage about high-water, but she will touch at low spring-tide, but without any hurt; for the ground is clean sand, and there is never any swell in it. The deepest water to anchor in, is in the channel of the river, about two cables-length S. S. E. from the W. end of



## From KILALLA to SLIGO.

of *Birterach Island*, when that end of it shuts on the land at the bar. Here there is a small Pool, with twelve feet the least water, in which a vessel may be kept, with three anchors out, from touching on either side of the channel.

The bar of *Kilalla* has but four feet water on it at low spring-tide; so that a vessel that draws ten feet must go over it at high-water with neap-tide; or at the last quarter of flood with spring-tide. In sailing over the bar, avoid *Carricabum Ledge*, above described, by keeping the old Storehouse just open of the steeple of *Kilalla*. Half a mile above the bar there is a stony ledge southward of the sandy Point of *Inishbrinann*; the top of which is covered with extraordinary high-tides only: half a cable northward of that ledge, the channel turns up S. eastward, towards the anchorage. The least water in this part of the channel is two feet at low spring-tide. At the part of the channel where it turns south-eastward, *Stammerbill House*, at *Rathfran*, may be seen through a sandy gap, next the Point of *Inishbrinann*.

The bar of Kilalla.

Ledge of stones above the bar.

# A Description of the Tides, Rocks, Shoals, Channels, Anchoring-Places, and Harbours, between KILALLA and SLIGO.

## CHART XVII.

### Tides between KILALLA and SLIGO.

## TIDES.

On the shores near *Kilalla*, it is high-water, on the full and change days, at five; near *Sligo* at 5½.

Time of high-water.

On this part of the coast, ordinary spring-tides rise twelve feet perpendicular; neap-tides rise six or seven.

Rise of the tide.

The stream of flood runs eastward along the coast, but its strength is scarce sensible, except in the narrow channels near *Sligo* harbour.

Velocity of the stream.

Along this coast there are no rocks, or shoals, to be feared till you are near the mouth of *Sligo* harbour, where *Wheaten Rock* is the first to be looked for.

ROCKS and SHOALS.

*Wheaten Rock* is a ledge extending above a mile N. E. and S. W. between *Rachli Point* and *Ballicornel*; the north part of it is covered with spring-tide only.

Wheaten Rock.

On the S. side of the Point of *Rachli*, about two cables-length from the high-water mark, there are two rocks that dry at low-water with spring-tide only.

Rocks near Rachli.

The extremity of the Point of *Rachli* shoals above a cable's-length southward.

Shoals at Rachli Point.

*Black Rock* lies in the mouth of *Sligo* harbour, is covered about high-water only, and has a conspicuous Tower built on it, which serves as a Beacon. To avoid the shallow water on the N. side of this rock, going in toward *Sligo*, keep above two cables-length from the Tower. Or keep a distinguishable Grove of Trees, which is near the N. end of the town of *Sligo*, on the top of the northmost hill of a distant ridge, which bears S. E. from the Grove, and extends southward. While that Grove of Trees bears on the north shoulder of that northmost hill, you will avoid the shallows near the Tower: while it is on the S. shoulder of that hill, you will avoid the shallow water on the larboard-hand, near *Lefidall Channel*.

Black Rock and channel.

### Anchorage near SLIGO.

About half a mile E. from the extremity of this Point of *Rachli* a vessel may stop, in moderate weather, on 2½ fathoms water, and clean ground. Keep above two cables-length from the Point of *Rachli*, to avoid the rocks there, and the shallow off the Point.

Anchorage near Rachli Point.

### OYSTER ISLAND Harbour.

*Oyster Island* is the only place where a vessel can ride afloat all hours of the tide; but must not ride long in it in the winter-time: for the bottom is rocky in many parts, and the rest gravel, which does not hold well in blowing weather, especially with spring-tides, which run about three miles an hour here, when strongest. The anchorage is, however, well-sheltered, and no great sea in it at any time. The best place to drop anchor in, is half a cable's-length above, or eastward of, the kay, nearest the island side, on three fathoms the least water. If a vessel must lie here any considerable time, or finds her anchor to drag, it will be prudent to move to the E. side of the kay, where she may lie a-ground easy, and nothing to hurt her.

In sailing in here, between *Cony Island* and the Point of *Rofs*, keep nearest the Point of *Rofs*; and take the perch, which stands on a rock there, on the starboard hand. That rock dries before half-ebb, and is sufficiently deep a ship's-length from it.

Rock and perch.

A ship that draws twelve feet water, should take half-flood to sail into this harbour; for with westerly winds there is a great swelling sea between *Rachli* and the Point of *Rofs*.

Vessels that draw ten feet water, may go up to the kay of *Sligo* with spring-tide; or may ground in any part of the channel, a mile above *Oyster Island*, without damage.

# A Description of the Tides, Rocks, Shoals, Channels, Anchoring-Places, and Harbours, between SLIGO and TILLEN HEAD.

## CHART XVIII.

### Tides between SLIGO and TILLEN HEAD.

## TIDES.

Between *Sligo* and *Tilen*, it is high-water on the shore, on the full and change days, at 5½.

Time of high-water.

Spring-tide, on this coast, rises twelve feet perpendicular; and neap-tide six or seven.

Rise of the tide.

The stream of flood comes from the westward, but is scarce sensible, except in narrow channels.

Velocity of the stream.

Wheaten



## From SLIGO to TILLEN HEAD.

- ROCKS and SHOALS.** *Wbeaten Rock*, and the rocks and shoals near *Sligo*, have been described in the former chart.
- Ledge and Rock off Gessigo, westward.** The small island, which lies westward of *Gessigo*, near *Wbeaten Rock*, has a ledge which extends southward from it a cable's-length; and a rock above a cable's-length eastward from it, which dries about half-ebb.
- Shoals and Rock eastward of Gessigo point.** About a mile eastward of *Gessigo Point*, there are two shoals, near half a mile off the shore, on which the sea breaks in blowing weather. And about half a mile north-eastward from these shoals, a mile from the shore, there is a rock that dries about half-ebb.
- Ledges at Inishmurry.** A ledge extends westward, from the W. end of *Inishmurry*, above a cable's-length; and another ledge eastward from the E. end of it, about a cable's-length.
- Boahinshi Rocks.** *Boahinshi Rock* lies about two miles northward of *Inishmurry*, and is always above water; on the E. side of it a rock extends eastward, above a cable's-length from it; and on the W. side of it, there is a rock a quarter of a mile from it, which dries about half-ebb.
- Turconnel Rock.** *Turconnel Rock*, near *Milk Harbour*, lies about a quarter of a mile from the shore, and a part of it is always above water.
- Carriknefsanach Rock.** *Carriknefsanach Rock* lies half a mile northward of *Derinifh Island*, and is covered with spring-tide only.
- Bulloch-more Shoal.** *Bulloch-more* is a rocky shoal, about a quarter of a mile long, from E. to W. which lies above a mile W. N. W. from the extremity of *St. John's Point*, in the mouth of *Kilibeg's Harbour*, and S. S. E. from *Inishduff Island*: the least water on it is six feet. It is avoided on the S. side, sailing along that coast, while the extremity of *St. John's Point* bears E. See more of this shoal in the description of *Kilibeg's Harbour*.
- Rock off Tilen Head.** Near two cables-length W. from *Racblibirn Island*, at *Tilen Head*, there is a small rock which dries about half ebb.

## HARBOURS.

## MILK Harbour.

This is a small creek, sheltered by *Derinifh Island*, and fit for small vessels only, that draw not above eight or nine feet water; and these must sail in with the last quarter of flood; for the channel is almost dry with low spring-tide; and there are several large stones scattered through it, which dry before low-water, which would hurt a vessel's bottom that grounded on them. The entry of this harbour is close along the E. side of *Derinifh Island*, and the anchorage is at the S. end of it.

To sail into this harbour, take three quarters flood, and keep about half a mile from the shore, till you see *Turconnel Rock*, whose top is always above water; and *Carriknefsanach Rock*, off the mouth of the harbour, which is covered with spring-tide only, and then discovers itself by a swell, or by a ripple on it: take *Carriknefsanach* on the starboard-hand, near a cable's-length, and sail straight for the E. side of the Point of *Derinifh Island*, and keep about half a cable's-length from that island, all the way up the channel; anchor off the S.W. point of the island, about half a cable from the high-water mark, on three fathoms at low-water. Here a vessel may ride safe all weathers.

## BALLISHANNON Harbour.

Rock near the entry.

This harbour is fit for small vessels only, of difficult access, because of the winding channel, and often dangerous with westerly winds; for then the bar breaks often from side to side, and the channel is scarce to be distinguished. At low spring-tide, there is not above two feet water in the entry. There is a rock which lies about a quarter of a mile up, on the N. edge of the channel, which is covered only at high-water spring-tide: the entry is about N. W. from that rock. The rock is to be taken on the larboard-hand going in, about a ship's-length or two. When you are a cable's-length above this rock, then there is no danger; for the water in the channel deepens to six or eight feet, and is sufficiently sheltered.

Anchorage.

The usual and best anchorage is about a third part of a mile below the town of *Ballishannon*, in a Pool where there is ten or twelve feet water, making fast to the shore to avoid the stream of the river. No stranger should attempt this place without a pilot; nor with one, except the bar is smooth. About high-water, with spring-tide, if the sea is not rough, a vessel that draws ten feet water may sail over that part of the bar, or entry, which is next the S. side of the channel. There are no distinct marks for keeping exactly in the channel.

## DONEGAL Harbour.

Black Rock.

Spit of sand on the S. side of the channel.

*Donegal* harbour is a Pool on the E. side of the peninsula, called the *Haffins*, or *Green Islands*, two miles below the town of *Donegal*; where small vessels may ride about half a cable's-length from the shore, on two or three fathoms water. The channel, leading to this anchorage, begins at *Black Rock*, about three miles below the *Green Islands*. This rock is always above water, and has a small rock on the S. side, about a cable's-length from it. There is a spit of sand that extends from *Murvacb Point* to about two cable's-length from the *Black Rock*: this spit makes one side of the channel. To enter this channel, take half-flood, keep half a mile from the shore, on the larboard-hand, till you are near *Black Rock*, and keep about a cable's-length, or a cable's-length and a half from it, steering E. N. E. past it, and then right on the *Green Islands*, keeping about two cables-length from the larboard shore. The spit of sand dries gradually from high-water to low.

## PORT Harbour.

Rocks near the kay.

Stopping-place.

This is a small bight on the N. side of *Inver Bay*, where there is a kay built on the W. side of the bight, capable of sheltering two or three small vessels that draw not above eight feet water. The kay is not built so far out as the tide ebbs. There is a small rock that dries at four hours of ebb, and lies about a cable's-length S. S. E. from the kay-head: take this rock on the larboard-hand going in.

A vessel may stop off this harbour southward, on from three to six fathoms water.

## KILIBEGS Harbour.

To make Kilibegs.

*Kilibegs* harbour is well-sheltered, good ground, and capable of large ships. The best anchorage is nearest the W. side of the harbour, when the ruins of the old Castle bears W. by N. and the E. end of the town N. N. E. on  $3\frac{1}{2}$ , or four fathoms the least water. Vessels that draw not above ten feet, may anchor nearer the town, when the point of the low green island bears on *Rotten Island*.

In order to find, at a distance, where this harbour lies, look for *Crunard Hill*, which appears with one remarkable sharp top, and is higher than any of the hills eastward of it: the entry to *Kilibegs* lies a little southward of that hill.

The



# THE WEST COAST OF IRELAND.

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## From SLIGO to TILen HEAD, and TORY ISLAND.

The rocks and shoals, near this harbour, are *Manister Shoal*, which lies near half a mile W. by N.  $\frac{1}{2}$  N. from *Inishduff Island*. The least water on it is five feet. To avoid it on the W. side, keep *Mukris Point* N. by W. To avoid it on the S. side, keep the S. end of *Inishduff E.* or open a little to the N. of *Drimenu Point*. To sail between it and *Mukris*, keep about half a mile from the coast of *Mukris*: or keep the low-water mark of the N. end of *Inishduff* a ship's-length open to the S. of *Drimenu*, when you will be two cables-length from it.

Rocks near Kilibegs.  
Manister Shoal

*Bullock-more* lies above a mile W. N. W. from *St. John's Point*. The least water on it is six feet. It is avoided on the W. side, when *Mukris Point* bears on the eastmost sharp top of *Sleauleag Hill*, near *Tilen*. To avoid it on the N. side failing to, or from *Kilibegs*, keep *Carrigaleppy Point* on the northmost remarkable hummock of *Salbeen Hill*. To avoid it on the E. side, failing between it and *St. John's Point*, keep the N. end of the sandy bay of *Fintrach* shut in by *Roscorkin Point*.

Bullock-more Shoal

*Black Rock* lies near a mile W. by N. from *Drimenu Point*, and is covered with spring-tide only. S. W. by W. from *Black Rock*, about two cables-length, there is a shoal on which the least water is six feet. To avoid this shoal on the S. side, keep *Mukris Point* on the outmost visible part of *Tilen Head*. You are past it to the eastward, when the highest top of *Crunarad Hill* is open to the E. of *Black Rock*.

Black Rock and Shoal

Within *Kilibegs* harbour, on the E. side, a quarter of a mile northward of the narrowest part, there is a rocky shoal above a cable's-length from the shore: on the shallowest part of it there is seven feet at low spring-tide. At this shoal the church bears W. S. W. and the ruinous castle W. by N. Leading marks to it are, the N. end of a low green Point (which is an island at high-water) on the W. side of the harbour, bearing on the S. gable of the church; and a small, but remarkable hillock, which is about half a mile from the extremity of *St. John's Point*, on the high-water mark at the S. end of *Rotten Island*. This hummock, two ship's-length open to the W. of *Rotten Island*, clears it on the W. side. In turning out, or into this harbour, you avoid this shoal on the S. side, while the church is open to the S. of the low green Point, or island before-mentioned; and you avoid it on the N. side, when the church is open to the N. of that Island.

Shoal within Kilibegs harbour.

On the N. side of *Salbeen Bay*, half a cable from the shore, and about a quarter of a mile south of the last-mentioned shoal, there is a small rock that dries about half-ebb.

Rock in Salbeen Bay.

### MACSWINE'S Bay.

In the mouth of *Macswine's Bay*, in the cove, or bight, on the N. side, ships may ride safe in the summer-time, or in winter when it does not blow hard from the W. or S. W. The best anchorage for large ships is off the middle of the Cove, on ten fathoms oozy ground. In winter, anchor farther within the bight, on the W. side of it, about a cable's-length from the shore, so as to ride on five or six fathoms water, when the *Black Rock*, near the Point, bears on the extremity of *St. John's Point*, where you will be pretty well sheltered from the violence of the sea with west winds. Farther out than this Bight, on ten fathoms at low-water, there are some parts rocky, which should be tried by the lead, before the anchor is dropt.

### TILEN Harbour.

*Tilen* harbour is a creek, where a few small vessels may ride safe in the summer-time. There is water sufficient for large ships; but they must anchor more in the open, where a great swell sets in, when it blows fresh from the west. This place is also liable to violent squalls of wind from *Sleauleag Hills*, when it blows hard from the N. W. and W. N. W. and there is hardly room to ride with more than half a cable: it is not therefore fit to lie long here in the winter. Small vessels may anchor on the W. side of the harbour, about half a cable's-length from the shore, on two, or  $2\frac{1}{2}$  fathoms water, where the entry is almost shut. Vessels that draw twelve feet, must ride a cable's-length northward of the Point, on the larboard hand coming in, on  $3\frac{1}{2}$  fathoms at low-water.

## A Description of the Tides, Rocks, Shoals, Channels, Anchoring-Places, and Harbours, between TILen HEAD and TORY ISLAND.

### CHART XIX.

#### Tides between TILen HEAD and TORY ISLAND.

TIDES.

It is high-water on the shores between *Tilen Head* and the *Island Tory*, on the full and change days at  $5\frac{1}{2}$ ; but on the shore of *Tory Island* it is high-water at  $4\frac{1}{2}$ . Time of high-water.

Ordinary spring-tides rise twelve feet perpendicular; neap-tides rise six or seven.

Rise of the tide.

The stream of flood sets in from south-westward, and off the coast runs not above one mile an hour when strongest.

Direction and velocity of the stream.

Near *Rdnanish Island*, which lies about two miles northward from *Dauras*, in *Boilach*, there are several shoals that discover themselves, by the sea breaking on them in blowing weather. Those on the W. end lie about half a mile from the Island. Off the E. end there are three shoals that discover themselves by the breakers; the eastmost of them is a mile and a half from *Rdnanish*; that nearest the island has but six feet water on it at low-water; the rest are sufficiently deep, for the sea does not often break on them, but would endanger a ship if they happened to break on her. These shoals, near this Island, are easiest avoided (when a ship must sail this way) by keeping between *Rdnanish* and *Dauras*, within a mile of the main.

ROCKS and SHOALS.  
Shoals near Rdnanish Island.

There is a small shoal above half between *Rdnanish* and *Inishkerach Island*, which shews itself by a breaking sea in blowing weather: it is never a continued breaking, but by intermissions of ten minutes, or a quarter of an hour or more.

Shoal between Rdnanish and Inishkerach Island.

*Bullocconnel* is a shoal that lies about N. by E.  $1\frac{1}{2}$  mile from *Inishkiel Island*, eastward of *Rdnanish*, on which the least water is said to be ten feet. This shoal is avoided on the W. side, while the hill of *Ui Island*, in the *Roffes*, is out a ship's-length by *Cruitermon Head*: it is avoided on the E. side, while there is but a ship's-length or two, of *Inishmacadurn Island*, near *Arran-more*, out by *Cruitermon Head*. *Inishmacadurn*, from this, appears a long sandy Island.

Bullocconnel Shoal, near Inishkiel Island.

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## From TILLEN HEAD to TORY ISLAND.

Inishkiel safest to run for in this neighbourhood. Rocks and shoals near Arran-more in the Rosses. Ledges at Ilancruin Island, and Inishkerach.

Rock and shoal near the S. side of Arran-more.

Turk Rock.

Ledge of Clacurr.

Stags of Uay.

Ballichonnel Rocks.

ANCHORING-PLACES and HARBOURS.

These shoals make it dangerous sailing along this part of the coast in blowing weather. The surest way to avoid these shoals, is to watch them at some distance, and avoid the places where the breakers appear. If a vessel is forced in between *Tillen Head* and *Arran-more*, the place she can run for, with the greatest prospect of safety, is *Church Pool*, on the E. side of the *Island Inishkiel*, which will be described hereafter.

*Ilancruin Island* is divided into two islands, about high-water. From the S. end of that Island, there is a ledge of rocks, which extend S. W. about two cables-length. Also a ledge extends N. W. from the N. end of it, reaching about half over towards *Inishkerach Island*, which renders the channel between these two Islands difficult. There is likewise a ledge that extends westward from *Inishkerach*, above a cable's-length. To sail between these two Islands, give the W. side of *Inishkerach* a birth of about two cables-length; and when the S. point of *Inishkerach* bears E. then stand in between the islands, sailing E. by S. and keeping above a cable's-length from the S. side of *Inishkerach*; or one-fourth from *Inishkerach*, and three-fourths from *Ilancruin*. This channel is to be pursued only in necessity, or if one is well acquainted.

About two cables-length S. W. from *Rannoch Point*, in *Arran-more Island*, there is a rock which dries about half-ebb; and a shoal about a quarter of a mile N. W. from the same point, on which the sea breaks in blowing weather. These make it very hazardous sailing along the W. side of *Arran*; which no one ought to do but in necessity; and then he must avoid the rocks and shoals, by noticing the breakers on them, and come to an anchor near the E. side of *Inishkerach*, where the vessel may ground on clean sand, under shelter of that Island.

*Turk Rock* lies near half a mile N. E. from the N. end of *Inishfri Island*, and dries before half-ebb. A leading mark to it, is the eastmost part of *Inishkerach*, just open of the westmost visible part of *Arran*. To avoid it on the E. side, keep the high-water mark of the W. end of *Ilancruin* on the outermost part of *Tillen Head*: to avoid it on the W. side, keep *Bloodyfarland Hill* near a ship's-length on the high part of the sandbanks of *Inishmacadurn*.

There is a ledge of rocks which extend southward from *Clacurr Point*, in *Arran*, above half a mile, and almost joins a spit of sand, which extends westward from *Inishmacadurn*; the extremity of which dries at low-water, with spring-tide.

The *Stags of Uay* lie about a mile south-westward of that Island, are always above water, and may be seen at eight or ten miles distance: the water is deep a cable's-length from them quite round.

*Ballichonnel Rocks* lie a mile and a half S. by W. from *Inishbirbir Island*, and dry with spring-tide only: Between these two, and the E. end of *Inishbirbir*, there are several other rocks that dry about half-ebb, or low-water.

## Anchoring-Places and Harbours in the Rosses.

Notwithstanding the many islands in the *Rosses*, there are but three places of anchorage that a stranger should venture to run for in blowing weather: these are *Church Pool*, at the E. end of *Inishkiel Island*; the E. end of *Arran-more Island*, and between *Croit Island* and *Mulachderrick Point*.

## CHURCH POOL Anchorage.

This is a small Bay on the S. E. end of the *Island Inishkiel*, in *Boylach*, in which the ground is clean and good, and the anchorage sufficiently sheltered, except when it blows hard between the S. W. and the N. W. points; for when the wind is from that quarter, a great swell sets in round the E. point of the Island, which sometimes breaks in the Bay, and makes it very hard riding. The best place of anchorage is off the middle of the Bay, when the N. E. point, next the ruinous Church, bears N. N. E. and just on, or a very little open of *Cruitermon Head*; and the S. W. point of the Bay, about W. S. W. on from two to  $3\frac{1}{2}$  fathoms water. Moor E. and W. The W. anchor may be laid a good way within the Bay, on four or five feet water; by which you will ride more out of the swell, when the wind blows from the westerly quarter. In sailing toward this anchorage, avoid the shoals and rocks near *Ronanish* and *Inishkiel* before described.

## ARRAN-MORE Anchorage.

Shoal near Ilangauna.

This anchorage is on the E. side of *Arran-more Island*, on the S. side of the small *Island Ilangauna*, on  $3\frac{1}{2}$ , or four fathoms, at low-water, about half between that Island and the Point of *Arran*, next S. W. of it, when *Uay Island* is shut in by the Point of *Ilangauna*. E. by S. from *Ilangauna*, about a cable's-length, there is a rocky shoal, on which the least water is five feet, which must be avoided in sailing into this anchorage. It is avoided if you are one-third from *Ilangauna*, and two-thirds from a black rock, always above water, which lies on the opposite side of the channel, about a mile E. S. E. from *Ilangauna*. Near this black rock the water is sufficiently deep. This is a very good place to stop in, when it does not blow hard at North: but it is not safe to lie long in it in winter.

## CROIT ISLAND Anchorage.

Vessels that draw not above nine or ten feet water, may run in on the E. side of *Croit Island*, and anchor on clean ground, pretty well sheltered, between the middle of *Croit* and *Mulachderrick*. Sail in between *Gola Island* and *Uay*, take the small Islands, near *Croit Island*, on the starboard-hand, and keep somewhat nearer to *Mulachderrick Point* than to these small Islands, and anchor above them, when a little Island on the *Mulachderrick* side bears S. or S. E. on two fathoms the least water.

## INISHMACADURN Harbour.

Between *Inishmacadurn Island*, and *Inishcu Island*, is the only place in the *Rosses* where vessels can lie safe in all weathers: but because of the narrowness of the harbour, and of the entry to it, it is fit for small vessels only. The best place of anchorage is between the N. end of *Inishmacadurn* and *Inishcu*, where vessels may lie a-ground quite safe on clean sand, or may ride in the stream of tide with one anchor on shore, on either side, on five or six fathoms water.

To sail into this harbour; after half-flood, come in along the E. side of *Arran*; keep a cable's-length from the W. side of *Tichter*; take a Black Rock, near the S. end of that Island, and always above water, on your larboard hand; and anchor half a mile, or a quarter, above that rock. The stream of tide in the anchorage, between *Inishcu* and *Inishmacadurn*, where it is narrow, runs about four miles an hour, when strongest.



# NAUTICAL DESCRIPTIONS

## OF THE

# NORTH COAST OF IRELAND,

FROM TORY ISLAND TO RACHLIN ISLAND.

*A Description of the Tides, Rocks, Shoals, Channels, Anchoring-places, and Harbours, between TORY ISLAND and MALIN HEAD.*

### CHART XXI.

*Tides between TORY ISLAND and MALIN HEAD.*

TIDES.

**B**ETWEEN *Tory Island* and *Malin Head*, it is high-water on the shores, full and change-days, at  $5\frac{1}{2}$ : only, Time of high-water.

on the shore of *Tory*, it is high-water then at  $4\frac{1}{2}$ .

Spring-tides rise twelve feet perpendicular, neap-tides six or seven.

Rise of the tide.

Flood-tide sets in from the south-westward, and near the S. W. end of *Tory* divides in two branches; one of which runs along the E. side of *Tory*, and the other along the west; and from thence eastward toward *Malin Head*, and the Sound of *Inishterbol*.

Direction of the stream.

The stream of tide, off this part of the coast, runs not above one mile and a half an hour when strongest.

Velocity.

On the W. side of *Horn Head*, there are several small rocks lying along the land, about half a mile off, which partly dry with spring-tide only, and partly about half ebb.

ROCKS and SHOALS.  
Rocks near *Horn Head*.

*Carrikavrank Rock* is always above water, and lies near two miles westward of *Melmore Point*. There is a shoal on which the sea breaks in blowing weather, about a mile E. of it, and another about a mile S. S. E.

*Carrikavrank*, and shoals near it.

About four miles N. by E. from *Melmore Point*, there is a small spot shallower than the rest in that neighbourhood, called *Lymburn*, on which the sea breaks with strong winds from the westerly quarter; or in calms, before a hard gale from that quarter. Some say, that there is but three fathoms on it at low-water; but as the water is deep between it and the land, and as it breaks but seldom, even in blowing weather, it is very probable there is more water over it than three fathoms.

*Lymburn Shoal*, off *Mulroy*.

There are two small rocks that lie about a mile eastward of *Ringmore Point*, on the E. side of *Mulroy* harbour, which dry about half ebb: also two shoals, one a mile N. E. and another half a mile N. from that Point.

Rocks off *Ringmore Point*, and shoals.

*Anchoring-places and Harbours.*

ANCHORING-PLACES and HARBOURS.

With southerly winds, in summer, a vessel may stop on the N. side of *Tory Island*, on clean sand, within half a mile of the shore, on eighteen or twenty fathoms water.

Anchorage near *Tory*.

Some, not well acquainted, have mistaken *Tory*, at a distance, for the *Island Inishterbol*, which lies ten or twelve leagues eastward of it; and, by that mistake, brought themselves into danger: to distinguish them, observe, that *Tory*, seen at a distance, rises into one hill only; but *Inishterbol* into two small tapering hills; the eastmost of which is the highest.

In the small Bay off the N. E. part of *Inishboffin Island*, a vessel may stop on three or four fathoms, about a cable's-length from the shore, if the wind is S. or S. W. In coming into this anchorage, avoid a small rock on the W. side of *Inishduich Island*, which lies near a cable's-length from the middle of that Island, and dries about half ebb; and some small rocks that lie above a cable's-length eastward of the S. point of it, and dry about half ebb.

Anchorage at *Inishboffin*.  
Rocks near *Inishduich*.

*SHEEP-HAVEN Harbour.*

This harbour, being open to the N. and N. E. it is not safe to ride long in it in the winter-time. The best part to ride in, is in the Bay of *Dunphannoch*, on the W. side of the entry, where there is water sufficient for the largest ship. Anchor there when *Catherine's Island* bears W. or W. N. W. about half a mile, on four or five fathoms water: or on three fathoms, about two cables-length from it. In the depth of six or seven fathoms, at low-water, there are some small patches of foul ground, which should be tried by the lead before the anchor is dropt. Small vessels, when necessary, may go over the bar, which lies northward of *Catherine's Isle*, in the channel, they may lie safe all weathers: or may lay one anchor a-shore, on *Black Rock*, near the houses of *Dunphannoch*, and another in the Channel, so as to ride in two fathoms water. The mouth of the Channel, at the Bar, is liable to vary. At high-water, with ordinary spring-tides, there are twelve feet water on the Bar; and nine or ten with neap-tide. In the Channel, above the Bar, there is from one fathom to two fathoms the least water. *Black Rock* is always above water, except at high-water spring-tide.

Anchorage above the Bar.

The Bar, and Channel above it.

*Black Rock*.

The best part to anchor in, when the wind is eastward of north, is on the E. side of *Sheep-haven*, in the mouth of the sandy Bay at the Isthmus, or neck, of *Rosgull*, on three or four fathoms water.

Anchorage with N. E. winds at *Rosgull*.

*Sheep-haven* is easily distinguished, at a distance, by *Tory*; and by *Horn Head*, which has two sharp tops, like horns, on the top of the cliff.

To fall in with *Sheep-haven*.

*MULROY Harbour.*

*Mulroy* harbour has water sufficiently deep in the anchorage for the largest ships, and is well-sheltered there from all winds; but a part of the channel, that leads to it, is narrow and difficult; and therefore not fit for large

large



## From TORY ISLAND to MALIN HEAD, and RACHLIN ISLAND.

- large ships that cannot be easily managed. About a mile and a half up, in the middle of the Bay, there are two rocks, called the *Black Rocks*, scarce half a cable's-length asunder; the westmost of which is always above water, except about high-water with spring-tide; the other dries at half-ebb: between these two rocks is the deepest and safest channel. On the W. side of the Bay, about two cables-length west from the *Black Rocks*, a sand-bank begins, and extends along the shore, as far as the Sandy Point at the Narrow. The N. part of this bank, next *Black Rocks*, dries with spring-tide only; and is avoided by keeping within a cable's-length of the *Black Rocks*; the rest of it has six feet on it at low-water. To avoid this part of the bank going up, when you are past the *Black Rocks*, steer about S. S. W. from the W. end of the sandy beach, on the larboard-hand, till you are about a cable's-length from it, then steer for the middle of the Narrow, at the Sandy Point; and anchor between that and *Duneduan Rocks*, which are always above water; or in the channel, half a mile above the rocks, on from four to seven fathoms.
- Near the small island, on the E. side of the entry, there are two rocks that dry at half ebb: and one S. E. of *Black Rocks*, about half a mile, which dries about half ebb. Also about a cable's-length eastward of *Black Rocks* there is a sandy shoal, on which the least water is six feet: the E. side, therefore, of this harbour, must have a birth of about two cables-length.
- In sailing for this harbour, from the eastward, avoid the rocks, and breakers, and ledges, formerly described, that lie off *Ringmore Point*.
- The best anchorage in *Mulroy* harbour, for small vessels, is at *Duneduan*, between the rocks (part of which is always above water) and the shore: lay one anchor northward on the shore, and another toward the middle of these rocks, on six or seven fathoms water.
- Mulroy* may be distinguished at a distance, by *Tory*, *Horn Head*, and by *Rosgull Hill*.

## LOCH-SULY.

- Loch-Suly* is a capacious and safe harbour, of easy access, and fit for ships and vessels of any size. A ship may stop in any part of it, for the bottom is all clean, and the depth moderate. The two best parts to ride in are, off *Buncrana House* (called a Castle) any where about two cables-length from the shore, on from four to eight fathoms water; and between the *Island Insh*, and *Ratbmullan*, nearest to the latter, on from five to eight fathoms water. In this last anchorage, the stream of tide runs about three miles an hour when strongest.
- In turning into, or out of this harbour, the only rocks to be avoided is *Suly Rocks*, on the W. side of the entry, about a mile and a half up. They lie about half a mile from the shore, and about two cables-length E. and S. E. from *Brown-George Rock*; a remarkable rock always above water, near the Point of *Doach-beg*. The northmost of these rocks is very small, and dries only at low spring-tide; the other dries an hour or two before low-water, and may be perceived in the calmest weather, by a sensible swell, or breaking on it. When they are seen, a ship may sail within half a cable's-length of the outermost of them.
- The hills on each side of *Loch Suly*, are so remarkable, that by some of them, as represented in the chart, or view of the coast, and by *Tory Island*, it will be easily distinguished at a distance.

## LOCH STRABRAGY.

This harbour is not fit for large vessels; for the channel is crooked and narrow, and the sea commonly very rough on the bar. Small vessels are sufficiently sheltered any where above *Runevaad Point*. No one should attempt this place, but in moderate weather, when the channel can be distinguished easily. The channel is on the W. side of the bar, close along the land. To enter it, take flood-tide, and keep the middle between the breakers on the bar, and the low cliffs on the W. or starboard side. Or, if the channel cannot be distinguished from the rest, keep about two ships-length from the cliffs, or visible rocks on that side. Anchor in the middle of the channel, between *Runavaad Point* and the *Meeting-house*, which is about half a mile eastward of that Point, on two fathoms at low-water. The stream of tide, when strongest, runs about two miles an hour in this anchorage.

## A Description of the Tides, Rocks, Shoals, Channels, Anchoring-Places, and Harbours, between MALIN HEAD and RACHLIN ISLAND.

## C H A R T XXII.

## TIDES.

## Tides between MALIN HEAD and RACHLIN ISLAND.

- It is high-water on the shore, between *Malin Head* and *Derry Loch*, at six, on the full and change-days; from the mouth of *Derry Loch* to *Rachlin Island*, at  $5\frac{1}{2}$ ; at *Rachlin*, at seven or eight.
- Ordinary spring-tides, on this part of the coast, rise eleven feet perpendicular; neap-tides rise six or seven; excepting in *Port Rusb*, where spring-tides rise only six feet; and from thence to *Rachlin*, and the coast over-against it, where spring-tides rise not above  $3\frac{1}{2}$ , or four feet perpendicular, and neap-tides not above  $2\frac{1}{2}$ .
- The principal stream of flood sets in from the north-westward, and divides near the high rocks that are on the north side of *Inishterbol Island* (by strangers called *Insterbul*); one branch running along the N. E. end of the Island, and the other along the S. W. end, close along the shore: these two branches join off the N. E. end; and, both together, run at first E. S. E. but shift gradually toward the N. as the flood-tide advances. The stream of ebb, near *Inishterbol*, takes the contrary direction. The stream of tide, near the shore, begins to run eastward at half-flood on the shore, and westward at half-ebb. In the channel, between *Inishterbol* and the *Garvilans*, the stream does not turn eastward till near five hours after high-water on the shore; nor westward till near five hours after low-water.
- In the channel, between *Inishterbol* and the *Garvilan Rocks*, or Islands, spring-tides, when strongest, run about four miles an hour. Along the coast, from thence eastward to the *Tuns*, within two or three miles of the shore, they run not above two miles an hour. From *Derry Loch* to *Rachlin*, not above one mile an hour, when strongest.



## From MALIN HEAD to RACHLIN ISLAND.

In the Sound of *Inisfterbol*, near the middle of the channel, when the wind is against the stream, there is a race, or rough stream of tide, that often breaks as if it had been shallow water; but it is above twenty fathoms deep in that part. Race of the tide near Inisfterbol.

## Rocks and Shoals between MALIN HEAD and RACHLIN.

## ROCKS and SHOALS.

There are no rocks, nor shoals, along this part of the coast, that lie above three quarters of a mile from the coast, or from some remarkable island or cliff near it.

*Docharty's Rocks* lie about half a mile W. N. W. from *Duvglasb* (which is the northmost round high rock of the *Garvilan Islands*); the west end of them dries with spring-tide only; other parts about half ebb. Docharty's Rocks.

There is a blind rock which lies W. from *Duvglasb* about a mile, and three quarters from the main: the least water on it is supposed to be about six feet; for the weeds are seen on it in the hollow of the waves. Leading marks to it are, *Duvglasb* on the E. end of *Inisfterbol*; and *Stuckiriddan Rock*, just on *Carrikaveal Head*. This Head is next S. E. from *Stuckiriddan*. Keep the Head in sight by either side of *Stuckiriddan*, and you avoid this shoal, sailing between the *Garvilans* and the main. Blind Rock near Duvglasb.

There is a small shoal, on which the sea often breaks, about a cable's-length W. of *Duvglasb*; and another about a cable's-length W. of the southmost *Garvilan Island*. Shoals near the Garvilans.

There is a rocky shoal which extends a quarter of a mile northward from the N. side of *Inisfterbol Island*. About half a mile westward of the *Skerries Islands*, near *Port Rusb*, there is a cluster of rocks always above water: about a cable's-length southward of these rocks, there is a small rock, called *Ker's Rock*, which dries at four hours ebb. In sailing between the *Skerries* and *Port Rusb Head*, to avoid *Ker's Rock*, keep one-third from the cluster of rocks, and two-thirds from the Head: or you may sail as near the Head as you please. Shoal near Inisfterbol Island.  
Ker's Rock near Skerries.

The *Stirks' Rock*, or the *Hen-and-Children*, is a small rock, with several sharp tops, lying above a mile south-eastward of the E. end of the *Skerries*, which is covered only about high-water. On the north and west sides it is deep, close to it; on the E. and S. sides it shoals half a cable's-length off: on these two sides, therefore, give it a suitable birth. Stirks' Rock.

About half a mile N. N. E. from *Kenbaan Head*, eastward of *Sheep Island*, there is a shoal, on which the least water is four feet. It is avoided on the N. side, while *Bengore* is out by *Carrikrede Point*. *Carrikrede* is the Point next W. of *Kenbaan Head*. Carrikvinian Shoal near Kenbaan Head.

## Stopping-Places between MALIN HEAD and RACHLIN ISLAND.

## ANCHORING-PLACES.

There are two places between *Malin Head* and *Derry Loch*, where a vessel may stop a tide in moderate weather; the first is about half a mile, or three quarters, S. E. from the *Garvilan Islands*, on from five to nine fathoms, clean sand. The other place is in *Culdaff Bay*, off the mouth of the river, about half a mile from the shore, on clean sand, or small shells. near the Garvilans.  
Culdaff Bay.

The Bay between *Inisboan Head* and the *Skerries Islands*, is all clean ground, and a moderate depth: ships, avoiding the *Tuns*, may stop any where there in the summer-time, above half a mile from the shore; except the wind is on shore. Derry Bay.

A ship may stop off the middle of the largest *Skerry Island*, on the S. side of it, where it appears lower than the rest. Anchor a little more than a cable's-length from the shore, on six or seven fathoms water. This anchorage is pretty well sheltered, and the ground said to hold well. In sailing in or out, avoid *Ker's Rock*, and the *Stirks' Rock*, as above directed. At the Skerries.

Between the *Skerry Islands*, and *Port Rusb Head*, the stream of flood sets out north-westward, and the ebb sets in south-eastward. The stream, in the narrowest part, runs about two miles an hour when strongest. Tide near this anchorage.

## LOCH FIOLE, or DERRY LOCH.

## HARBOURS.

*Loch Fiole* (falsely spelled in draughts *Foyle*) is a capacious harbour, where the largest ships may ride in safety all weathers. The properest anchorage, for large ships, is three or four miles above the entry, on the N. side of the Bay, about half a mile, or three-quarters, from the shore, on from four to eight fathoms water. Ships, that draw not above twelve feet, will ride easiest between *Quigley's Point* and *Tewer*, on  $2\frac{1}{2}$ , or  $3\frac{1}{2}$  fathoms the least water.

In sailing into *Derry Loch*, the *Tuns Sand-bank* is the only shoal to be avoided; it lies on the S. side of the entry, leaving a channel between it and the land, on the starboard-hand going in, of three-quarters of a mile broad. It is about two miles long, from E. to W. and near a mile broad. A small patch, near the middle of the N. edge of it, dries about  $2\frac{1}{2}$  hours of ebb: with some neap-tides that part is said not to be quite covered: when under water it is always to be distinguished by the sea breaking on it, except in very extraordinary calms. This patch is observed to diminish, and increase by turns; and sometimes to wash away quite, but afterwards to be collected a-new: so that in a course of years it will appear larger and less, and dry sooner or later in the tide. A leading mark to it is, *Magiligan's Point*, on *Redcastle House*: therefore, that House open with the Point, clears it along the N. side. The W. end of the *Tuns*, next *Magiligan's Point*, has but two or three feet water on it, with low spring-tide; the rest has six feet at the least, but nine for the most part. Tuns Bank.

To sail into *Loch Fiole*, take flood-tide, or a brisk breeze of leading-wind for stemming the tide, which runs in the narrow about  $3\frac{1}{2}$  miles an hour, when strongest; and keep *Glenegad Head* (the northmost Head visible) two or three ships-length out by *Inisboan Head*, till the extremity of the grass, or high-water mark, of *Magiligan's Point*, bears on the S. end of *Sheriff's Mountain*, near *Londonderry*: or till the mouth of *Derry River*, at *Kilmore Point*, bears on, or a little open to the N. of *Magiligan's Point*; then steer right in for the entry, keeping about half a mile from the shore, on the starboard-side. The *Sheriff's Mountain* is the south-westmost but one, at the Head of *Loch Fiole*. To sail into Loch Fiole.

If these marks are not plainly seen, keep *Glenegad Head* fairly out by *Inisboan*, till you are about half a mile from *Inisboan Head*; then steer right in for the middle of the entry, between *Greencastle* and *Magiligan's Point*, and keep half a mile, or above two cables-length, from the starboard shore.

The Sand-banks within *Loch Fiole* to be avoided, are *Redcastle Bank*, the *Big Bank*, and *Tewer Patch*. Banks within Loch Fiole.

*Redcastle Bank* reaches from the shore of *Redcastle House*, near half a mile southward. The southmost end of it has one fathom the least water on it; the rest dries gradually. It is avoided when the church of *Derry* is on, or just in, by the houses over-against *Kilmore Point*.

The *Big Bank* lies almost parallel to the N. side of the *Loch*. The west end of it dries about half ebb; the rest not till low-water, or with spring-tide only. The E. end bears about N. from *Whitcassle*; the W. end reaches Big Bank.



## From TUSKER ROCK to WICKLOW.

reaches almost to *Tewer*. There are no distinct land-marks for avoiding this Bank, therefore go by the Lead and stand no nearer it than  $2\frac{1}{2}$  fathoms.

*Tewer Patch.*

*Tewer Patch* is a sand-bank, always below water, which extends from the S. W. end of the *Big Bank*, about two-thirds over, toward the houses of *Tewer*. The least water on it, near the channel, is six feet; about the middle of the Patch, there is but three feet at low spring-tide: in the channel between it and *Tewer*, there are two fathoms. To sail through this channel, keep the Church, or highest building, of *Derry* just hid, or opening and shutting with the rising ground on the N. side of *Derry River*, next *Kilmore Point*: when you have passed *Tewer* houses, steer more southward, on the Round Hill next S. of *Derry*, till *Derry* bears over the middle of *Kilmore Point*, then steer right for that Point.

Two hours of flood necessary here.

Every vessel should have at least two hours of flood before they sail through this channel; that in case she happens to ground (which the best pilots can hardly avoid, if the ship draws twelve feet), she may be afloat soon.

Appearance of *Kilmore Point*.

Good anchorage at *Derry*.

*Kilmore Point* appears a low, narrow Point, with some houses at the N. end of it, which may be seen in clear weather from the entry of the Loch. From *Kilmore Point* the land rises gently towards *Derry*, at an angle of about ten or twelve degrees. Near *Derry*, there are several remarkable hills. Large ships have sufficient depth of water, and good ground, close by the town.

## BAN-WATER.

This River is capable of small vessels only; for, in the channel over the Bar, there is not above three feet water at low spring-tide; about ten feet at high-water; and eight at high-water neap-tide. Within the Bar the depth is much the same. Half a mile above the Bar, in the widest part, it dries quite across with spring-tides.

## PORT-RUSH, or PORT-RASK Harbour.

This is a small creek at the town of *Port-Rush*, into which a vessel that draws not above seven or eight feet may go at high-water, and must lie aground most of the tide; but the bottom is not sufficiently cleared of rocks to lie safe all weathers. Off the mouth of the harbour, a vessel may stop on clean sand, on from three to seven fathoms water.

## NAUTICAL DESCRIPTIONS

OF THE

## EAST COAST OF IRELAND,

FROM TUSKER TO RACHLIN ISLAND.

*A Description of the Tides, Rocks, Shoals, Sand-Banks, Channels, Anchoring-places, and Harbours, between TUSKER and WICKLOW.*

## C H A R T XXIII.

## TIDES.

*Tides between TUSKER and WICKLOW.*

Time of high-water.

ON the shore of *Wexford* it is high-water on the full and change days of the moon, at seven o'clock. At *Tusker*, the stream of ebb, or westward stream, does not begin till  $8\frac{1}{2}$ : at *Arklow Bank*, and at the banks off *Wicklow*, the stream of ebb begins to run southward at  $9\frac{1}{2}$ .

Rise of the tide.

Direction of the stream.

To be attended to in sailing along the coast.

Velocity of the stream.

On the shores between *Wexford* and *Wicklow*, the tide rises so little, that it is difficult assigning the precise time of high-water; but it seems to be about ten at *Wicklow*; and off *Wicklow Head*, by the stream, at nine.

Spring-tides, between *Tusker* and *Wicklow*, rise not above four feet at most; neaps not above  $2\frac{1}{2}$ .

Along this part of the coast, the stream of flood sets N. N. E. across the Banks, and the stream of ebb S. S. W.: so that flood-tide keeps ships, that are without the Banks, from them; and ebb carries them toward the Banks. In sailing from *Tusker* to *Dublin*, in the night-time, or in dark weather, this direction of the streams of flood and ebb should be carefully attended to.

Near *Tusker*, and in the principal stream of tide from thence, spring-tides run about four miles an hour when strongest; neap-tides one and a half. On *Arklow Bank*, spring-tides, when strongest, run three miles an hour; within it, about one: near *Wicklow Head*  $4\frac{1}{2}$  miles an hour.

## ROCKS and SHOALS.

*Rocks and Shoals between TUSKER and WICKLOW.*

*Tusker.*

*Tusker* is a large remarkable rock, the height of a house above the water. It lies E. of the S. end of the *Great Saltee Island*, and  $2\frac{1}{2}$  leagues E.  $\frac{1}{2}$  S. of *Carnfore Point*. Ships from the westward, bound up to the *Irish* channel, should endeavour to see this rock before they set their course northward.

About



## From TUSKER ROCK to WICKLOW.

About half a mile S. W. from *Tusker*, there is a small rocky shoal, on which the least water is five feet. Shoal near Tusker.  
Keep a mile from the S. W. side of *Tusker*, or within half a mile of it, and this shoal will be avoided.

*St. Mary's Rock* lies off *St. Mary's Bay*, and dries about half-ebb. It is about three quarters of a mile S. by W. from a remarkable rock always above water. St. Mary's Rock.

There are two small rocks near *Greenore Point*; the northmost of which is a cable's-length from the shore; the southmost is about two cables-length. Greenore Rocks.

The *Bailies* is a long narrow ridge of sand, about half way between the Main and *Tusker*, on which the least water is three fathoms; it may always be distinguished by a grey ripple, or by a rough breaking sea on it, except about slack water in a calm. The N. end of it reaches near to the *Splough*; the ripple on the S. end bears W. from *Tusker*, and about E. by S. from *Carnfore Point*: to avoid this shoal on the E. side, keep nearer to *Tusker* than to the *Wexford* side. The Bailies.

The *Splough* is a rocky shoal, about one mile S. E. from *Greenore Point*; the least water on it is three feet, and near the N. end. The Splough.

The *New Grounds* is a sandy shoal four miles long, from S. S. W. to N. N. E. and a quarter of a mile broad; on it the least water is ten feet, which is near the middle. The S. end bears E. about five miles from *Greenore Point*, and  $5\frac{1}{2}$  miles N.  $\frac{1}{4}$  E. from *Tusker*: at the S. end of it the *White House of Roslare* is in a line with the S. end of *Fort Mountain*, near the southmost *Humock*. At the N. end of it, *Greenore Point* bears S. W. by W. and the *Point of Fort N. W.* by W. The New Grounds.

*Holden's Bed* lies off *Roslare Bay*, about two miles N. E. of *Greenore Point*. It is about three miles long from S. W. to N. E. and near a mile broad: the least water on it is seven feet, which is near the S. W. end; the rest of it has two, and two and half fathoms. To sail along the S. W. end of it; keep the southmost of the two highest mountains visible N. W. or the northmost of them N. W. by N. These mountains are in the county of *Carlow*. To sail between it and the *New Grounds*, keep *Torra Hill* a little without *Cabore Point*. Holden's Bed.

The *Dogger Sand* lies near the entry of *Wexford* harbour, is about  $1\frac{1}{2}$  mile long from N. to S. Part of the N. end of it is always dry, except when the surf washes over it; the rest dries gradually. The dry part is apt to shift with gales of wind. To avoid the N. end of this sand, and the spit off the *Raven Point*, sailing into *Wexford* harbour, keep a cable's-length from the dry part of the *Dogger*, or keep the houses of *Fort W.* by S. or the extremity of the *Point of Fort W.*  $\frac{1}{4}$  S. when it will be in a line with the house of *Drynach*, which may be seen between two small bushes of wood. The anchorage is on the W. side of the *Point of Fort*, a cable's-length or two from the shore. Dogger Sand.

The *Rusk-and-Ram* is a narrow sand-bank, within a quarter of a mile of *Cabore Point*, and extends S. by W. about four miles. The least water on it is six feet, which is toward the N. end of the Bank, about half a mile from the shore. The S. end is above two miles from the shore, and abreast of the N. end of the *Red Clay Cliffs*, beyond which a remarkable slated house may be seen about three or four miles from the shore, on a rising ground, and bearing N. W. To sail without, or along the E. side of the *Rusk-and-Ram*, keep *Torra Hill* out by *Cabore Point*. To sail from the S. between the N. end of it and *Cabore Point*; when you are about half a mile from that Point, keep within two cables-length of the shore, and take your soundings off the shore. Rusk-and-Ram.

*Kilgorman Bank* begins about a mile E. of *Kilmichael Point*, and extends in a narrow ridge, about five miles S. W. by S. the depth on it, at low-water, is from three feet to fifteen: the northmost half of it is the shallowest; which is avoided while *Torra Hill* bears N. W. Kilgorman Bank.

*Kilmichael Bank* lies between *Kilgorman Bank* and the shore, but much nearer the shore; it extends about four miles N. E. and S. W. the shallowest part is near the S. end, where the least water found was six feet. The north end is broader, and the water deeper, than on the south. The north end of the shallow part begins about a cable's-length from *Kilmichael Point*. Kilmichael Bank.

*Kilmichael*, and *Kilgorman Banks*, are avoided on the E. or outside, while *Wicklow Head*, or *Mizen Point*, bears N. N. E. Both Banks avoided on the outside.

*Arklow Bank* is a narrow sand-bank off *Arklow Bay*, about two leagues from the land, and near four leagues long from S. S. W. to N. N. E. The shallowest part of it is near the N. end, where the least water is four feet: the S. end has from eight feet to three fathoms on it at low-water. This Bank always shews itself by a ripple, or by breakers on it, except about slack-water. To sail along the S. end of *Arklow Bank*, keep *Arklow Hill* N. W. or *Ardneri Hill* N.  $\frac{1}{2}$  W. To sail a-crofs the N. end of it, keep *Mizen Point* W.  $\frac{1}{4}$  S. or *Wicklow Head* N. by W. or *Arklow Point* W. S. W.  $\frac{1}{2}$  S.

*Wolf Rock* lies near the shore of *Inishpoin* parish, about a mile southward of *Mobri*: the S. end of it dries about half-ebb; the rest gradually till low-water. Keep above a quarter of a mile from this part of the coast, to avoid the *Wolf Rock*. Wolf Rock.

The *Horfe-shoe Bank* begins at *Wicklow Head*, about half a cable's-length from the shore, and extends southward along the land, above a mile, ending when *Mobri House* bears W. by N. The shallowest part is near the N. end, where the least water is four or five feet; in other parts there are from nine feet to three fathoms. To sail without the *Horfe-shoe*, or along the E. side of it; keep *Bray Head* in sight by *Wicklow Head*. To sail between it and the shore, from the S. when *Mobri House* bears W. by N. keep a cable's-length or two from the shore, till you are near the extremity of the Head, then keep within half a cable's-length of the shore, till you have past the Head. Horfe-shoe Bank.

## Stopping-places between TUSKER and WICKLOW.

## STOPPING-PLACES.

The places of anchorage, between *Tusker* and *Wexford*, are *Roslare Bay* and *Wexford* harbour, which are described in page 2. Between *Wexford* and *Wicklow*, a vessel, in moderate weather, may stop any where within the Banks; or within a league of the shore, when the shoals near it are avoided, on clean ground. Off *Arklow*, about a mile E. or S. E. of the river's mouth, it is reckoned as good ground as any along this part of the coast, there being clay in several parts below the sand. Anchor on from five to eight fathoms water. Off Arklow.

*Arklow* harbour is capable of boats only, or vessels that draw not above four feet water; and such cannot go in without high-water spring-tide. The channel is crooked, and liable to vary. Arklow harbour.



*A Description of the Tides, Rocks, Shoals, Sand-Banks, Channels, Anchoring-Places, and Harbours, between WICKLOW and the SKERRIES.*

C H A R T XXIV.

TIDES.

*Tides between WICKLOW and the SKERRIES.*

|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Time of high-water.                              | On the shore from <i>Wicklow</i> to the <i>Skerries</i> , and on the <i>Irish</i> grounds, or sand-banks off the S. part of that coast, it is high-water on the full and change-days of the moon, about 10½ o'clock; but the stream of ebb, or southward stream, begins about nine, near two hours sooner.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Rise of the tide.                                | On the shore between <i>Wicklow</i> and <i>Dalky Island</i> , and on the sand-banks of it, ordinary spring-tides rise but four feet perpendicular; neap-tides two, or 2½: from <i>Dalky</i> to the <i>Skerries</i> , spring-tides rise ten or eleven feet perpendicular; neap-tides five or six.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Direction of the stream.                         | The stream of flood along this part of the coast sets in from the southward, and runs N. N. E. along the Banks, crossing most of them obliquely; flood without the Banks, carrying vessels from them, and ebb carrying them toward the Banks; which all that sail this way in the night ought carefully to attend to, and make proper allowance for it in the ship's course.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| To be attended to.                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Velocity of the stream.                          | The stream of tide on the Banks, when strongest, runs about three miles an hour; within the Banks it runs not above one, northward of the hill of <i>Howth</i> , the stream of tide is scarce sensible.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| BANKS between WICKLOW and DUBLIN. Irish Grounds. | The several sand-banks that lie off the coast, between <i>Wicklow</i> and <i>Dublin Bay</i> , are, in general, called the <i>Irish Grounds</i> ; but different parts of them are distinguished by different names. The <i>Ridge</i> is the outermost, or eastmost part of the <i>Irish Grounds</i> , and the <i>Kesh</i> the northmost. They are for the most part very narrow; not above a cable's-length or two broad; and, in some parts, the shallow water is not above a quarter of a cable's-length broad; and on that account, no doubt, some parts are liable to considerable variations. They are always to be perceived by a ripple, or breakers, close to the edge of the shallowest part, except about slack-water in very moderate weather: in calms, the shallowest part is smoothest. The stream of tide runs obliquely over them, and is considerably weaker a cable's-length from them than on them. |
| Wicklow Banks.                                   | <i>Wicklow Banks</i> are two narrow patches of sand that lie about two leagues N. E. from <i>Wicklow Head</i> , on which the least water is 2½ fathoms. To sail between them and <i>Wicklow Head</i> , keep the <i>Sugar-loaf Hill</i> N. N. W. or take <i>Wicklow Head</i> W. and steer in W. by N. or <i>Wicklow Head</i> W. by S. about two or three leagues, and steer in W. To sail along the N. side of them, or between them and the <i>Ridge Bank</i> , keep <i>Sugar-loaf Hill</i> N. W. The stream of tide on <i>Wicklow Banks</i> runs about 3½ miles an hour when strongest.                                                                                                                                                                                                                                                                                                                              |
| Rough water near Wicklow Banks.                  | In the neighbourhood of <i>Wicklow Banks</i> , there are several parts where the sea appears rougher than in other parts, and look like shallows; but the depth there is sufficient for the largest ships, and the roughness is occasioned by the water being somewhat shallower suddenly, the bottom rising into a steep ridge.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Ridge Banks.                                     | The <i>Ridge Banks</i> lie about four miles north-eastward from <i>Wicklow Banks</i> , and extend in a curve, near five miles E. S. E. from the S. end of <i>Bray Bank</i> : they consist of three several Banks, formed partly of smooth stones, like paving-stones, and partly of small gravel. The least water on them is nine feet. At the S. E. extremity of the <i>Ridge</i> , <i>Wicklow Head</i> bears S. W. ½ W. and almost disappears under a hill beyond it, which is higher; <i>Sugar-loaf Hill</i> bears N. W. by W.; the N. end of <i>Bray Head</i> N. W. by N.; <i>Dalky Obelisk</i> N. N. W. ¼ W.; and <i>Howth</i> light-house N. ¼ W.                                                                                                                                                                                                                                                               |
| Avoided.                                         | To sail along the E. end of the <i>Ridge Banks</i> , and without all the other Banks; keep <i>Howth</i> light N. W. by N. or <i>Ireland's Eye Island</i> its own length open of <i>Howth Head</i> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Bray Bank.                                       | <i>Bray Bank</i> is a narrow Bank of sand, beginning near the W. end of the <i>Ridge</i> , and extending about eight miles N. by E.: the least water found on it was nine feet. Near the channel, between it and the W. end of the <i>Ridge</i> , the N. end of <i>Bray Head</i> bears N. W. and on a long tapering hill, which resembles the <i>Sugar-loaf Hill</i> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| The Kesh Bank.                                   | The <i>Kesh</i> is a continuation of <i>Bray Bank</i> . But much broader at the N. end. The least water found on it was six feet. To avoid it on the E. or outside; keep <i>Ireland's Eye</i> its own length open of <i>Howth</i> ; or <i>Howth</i> light N. N. W. To avoid it on the N. side, sailing into, or out of <i>Dublin Bay</i> ; keep the <i>Obelisk</i> on <i>Dalky Hill</i> W. or a little southward of two distinguishable Hummocks, on the slope of a high black hill, next W. of <i>Dalky Hill</i> : or the W. end of the <i>Ragged Sugar-loaf Hill</i> , a little out to the N. of the north end of <i>Bray Head</i> .                                                                                                                                                                                                                                                                                |
| To avoid it.                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Dalgany Bank.                                    | <i>Dalgany Bank</i> lies about two miles southward of <i>Bray Head</i> ; it begins about a quarter of a mile from the shore, and extends E. by N. about half a mile. It is composed of gravel stones, on which the least water is twelve feet. Near the shallowest part of this Bank, the rocky point at the S. end of <i>Gray-stone's Bay</i> , bears on the N. top of the <i>Ragged Sugar-loaf Hill</i> ; and the <i>Puck</i> is on the N. end of the <i>Knuck</i> . The <i>Puck</i> and <i>Knuck</i> are two remarkable round hills, southward of <i>Bray Head</i> ; the <i>Puck</i> is a small hillock, but the <i>Knuck</i> is considerably larger, and westward of the other.                                                                                                                                                                                                                                   |
| Rocks near Dalky Island.                         | Near <i>Dalky Island</i> there are several small rocks always above water; and two on the N. side of it always below water: to avoid these two, keep two cables-length from the visible rocks.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

STOPPING-PLACES.

*Stopping-places between WICKLOW and SKERRIES.*

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Within the Irish Ground. | In moderate weather, ships may stop almost any where within the Banks between <i>Wicklow</i> and <i>Dublin Bay</i> : the best parts, whether with easterly or westerly winds, are between <i>Bray Bank</i> and the main, at the distance of from two miles, to half a mile of the shore. Here there is very little stream of tide; and with easterly winds, the violence of the sea is considerably broke off by the Banks. All the shore southward of <i>Bray</i> is soft beach, almost steep too; so that if a ship was driven ashore there, there would be little hazard of losing lives. There is no safe way to get into this anchorage, but either between <i>Wicklow</i> and the <i>Ridge Banks</i> ; or between the <i>Kesh</i> and <i>Howth</i> . |
| Dublin Bay.              | There is good anchorage in the mouth of <i>Dublin Bay</i> , when the wind does not blow hard from the E. or S. E. The ground in this bay is all clean; and in some parts there is strong clay, which holds well; but being open to the E. and S. E. hard gales from that quarter set in so great a sea, that ships have been often obliged to leave their anchors, and run for the harbour, or for some other place of safety. There is a light kept on <i>Howth</i> to direct ships into this Bay in the night-time. If you are coming from the southward, avoid the <i>Kesh</i> , by keeping that light N. W. by N.                                                                                                                                      |

The



## From WICKLOW to the SKERRIES.

The best anchorage in *Dublin Bay*, is on the S. side, about two miles from the shore, when *Dalky Island* bears S. or the Obelisk on *Dalky Hill* S. S. W.  $\frac{1}{4}$  S. or the light-house of *Howth* N. E. or N. E. by E. on five or six fathoms water. Anchorage in Dublin Bay.

Along the S. side of *Dublin Bay*, and from thence to *Wicklow Head*, the stream of tide, near the shore, begins to run southward two hours before low-water, and turns northward two hours before high-water on the shore; but runs not above one mile an hour when strongest. Stream of tide on the S. side of Dublin Bay.

On the N. side of *Dublin Bay*, the stream of tide, near *Howth*, runs eastward nine hours, and westward three hours. It begins to run eastward at one quarter of flood, and continues so till it is three quarters ebb on the shore; and runs westward during the last quarter of ebb, and the first quarter of flood; but not above one mile an hour, when strongest. Stream on the N. side.

In moderate weather; or when the wind is off the shore, ships may stop any where between *Howth* and *Lambey Island*, on from five to twelve fathoms water. Small vessels, with easterly winds, may shelter near the W. side of *Ireland's Eye*, about a cable's-length from the shore, on two fathoms water, on clean sand. In sailing into this anchorage, between *Howth* and *Ireland's Eye*, keep near mid-channel, or above one-third from either side; for there is a rock that dries with spring-tide only, which lies about one-third over from the *Howth* side; and small rocks that dry about half tide, that lie near one-third over from the S. end of *Ireland's Eye*. Anchorage between Howth and Lambey, near Ireland's Eye.  
Rocks between Howth and Ireland's Eye.

In moderate weather, or when the wind is off shore, ships may stop any where between *Lambey Island* and the *Skerries*, or *Rockabill*, on from six to fourteen fathoms clean sand. There is a small rock, near two cables-length W. from the W. point of *Lambey*; and two small rocks, about a cable's-length N. from the N. W. point of *Lambey*: these dry about half ebb. Anchorage between Lambey Island and the Skerries.  
Rocks near Lambey.

## WICKLOW Harbour.

## HARBOURS.

*Wicklow* harbour is fit for very small vessels only; for in the channel going in along the shore, there is not above nine feet at high-water spring-tide, and six or seven with neap-tide. There is a new channel lately opened across the low Point, and a kay built, a little westward of the old channel, with a view of making a deeper entry; but I have not learned the success of this scheme. Deepening the natural channel, would seem the most likely method of improving that harbour.

## DUNLARY Harbour.

*Dunlary* harbour lies on the S. side of *Dublin Bay*. Within the kay there are twelve feet water, at high-water spring-tide, and nine at high-water neap-tide. Keep within half a cable's-length of the kay-head, going in, to avoid a ledge, and a small rock that dries about half ebb, which lies westward of the entry. Some vessels, that have hard riding in *Dublin Bay*, with N. E. winds, may find safety, by running into this harbour about high-water.

## DUBLIN Harbour.

*Dublin* harbour is sheltered on the S. side by a wall and piles, carried above three miles eastward into the Bay. Ships that draw fourteen feet water, may go into it at high-water neap-tide: and ships that draw sixteen feet, may go in at high-water spring-tide; but they must lie a-ground. Ships that draw but nine or ten feet, may ride a-float two cables-length above the end of the Piles in *Pool-beg*, in pretty good shelter; in the summer-time: in winter it will be prudent to go a mile farther up, so as to take the ground about half ebb; or to lie along the wall, or along the kay above *Ring's-end*.

There is a light-house built at the end of the Piles, and a light kept in it all night to direct ships into the harbour, when the tide will permit: there are two buoys, one at each end of the Bar, for avoiding it; though it is scarce-worth pointing out, there being but one foot less water on the shallowest part of it, than in what is called the channel near it. The least water on the Bar is near the W. end; and is six feet at low-water; on other parts there are seven or eight feet, with ordinary spring-tides: there is also a buoy laid at the point of the *North Bu.* land, opposite to the end of the Piles, which must be taken on the starboard-hand going in, about half a cable's-length. Light House at the Piles of Dublin.  
Bar and Buoys.

To sail into *Dublin* harbour: a large ship, sailing near the S. side of *Howth*, about low-water, should avoid a sand-bank that lies off *Candlestick's Bay*, about half a mile from the shore; the least water on it is three fathoms; so that only large ships, and near low-water, need mind it. It is avoided along the E. end, while the *Ragged Sugar-loaf Hill* is out to the eastward, by the middle of *Dalky Island*. It is avoided along the S. side, while the Light-house at the Piles bears W. by N. then at half-flood, or more, according to the water your ship draws, keep the southmost point of *Howth*, called the *Baily*, E. or the light of *Howth* E. by N. or the Piles light W. by S. till you come up with the E. buoy of the bar; take it on your larboard-hand, at the distance of from a ship's-length to half a cable's-length, and steer right for the Piles, keeping the buoy, on the point of the *North Bu.* on your starboard-hand, half a cable's-length, and anchor two or three cables-length above the end of the Piles, in *Pool-beg*, about a cable's-length from the Piles; or go a mile or two farther up, as may be convenient. To sail into Dublin harbour:  
Bank near Candlestick's Bay.

## BALDOIL Harbour.

*Baldoil* is a creek, on the N. side of *Howth*, which is only fit for small vessels that are acquainted with it. The channel into it is long, crooked, and not sufficiently perched. There is no perch, nor buoy, to point out the entry of the channel; but there are three perches along the N. side of it, the first of which is half a mile W. N. W. from the mouth of the channel; the other two perches are placed on the dry sand, within half a cable of the N. edge of the channel. Three feet is the least water in the channel. At high-water spring-tide, there are thirteen or fourteen feet in it; at high-water neap ten or eleven. If a stranger is under any necessity of running for this place, he should take three quarters flood, keep the middle between *Ireland's Eye* and *Howth*; and when *Ireland's Eye* bears N. E. then keep a cable's-length from the *Howth* shore, and drop anchor above the middle perch, on the S. side of the creek, under shelter of the Point.

## MALAHIDE Harbour.

This harbour is capable of vessels that draw ten or twelve feet water; but as there are but three feet at low-water in the entry of the channel, they cannot go in till the last quarter of flood. In this harbour, between the two Points, vessels that draw ten feet may ride a-float all times of the tide.

In the mouth of the channel, there is a patch, or bank of small gravel, called *Maldouny*, which divides it into two channels, the south and the north: this bank dries at low-water, except with dead neaps. The south channel is widest, but the north channel straightest, and easiest kept. The least water in each is three feet. To sail through the north channel: take four hours flood; keep the point of *Rush* a ship's-length out to the E. Maldouny Bank.  
To sail into Malahide.



## From WICKLOW to the SKERRIES, and St. JOHN'S POINT.

of *Cable Rock*, which is near the *Point of Portrane*, to clear the point of the sand, which lies on the north side of the entry; and when the *House-on-the-Hill* bears W. keep it so till the steeple of *Swords* bears W. N. W.  $\frac{1}{2}$  N. and open to the S. of the westmost remarkable house of *Malabide*, which stands near trees, and has a chimney-head on the middle of the roof: sail in by this mark till you are at the buoy between the Points, and there drop anchor. A beacon is proposed to be placed near the high-water mark, to bear on the *House-on-the-Hill*, for a more distinct leading-mark past *Maldouny*, and through this channel.

To sail through the south channel.

To sail through the south channel: take four hours flood, keep the steeple of *Swords* on the eastmost house of *Malabide*, adjoining to the Ball-ground: or keep the above-mentioned remarkable House, at the W. end of *Malabide*, a sail's-breadth open to the north of the *Green Point* between *Robert's Walls* and *Malabide*.

## ROGERSTON Harbour.

In *Rogerston* harbour, there are ten or eleven feet water at high-water spring-tide, and eight or nine at high-water neap-tide. The channel is almost dry at low-water spring-tide. There is a perch on the tongue of sand on the north side of the entry, about a cable's-length and a half from the extremity, which was formerly a mark for entering the channel; but is no mark for it now, the channel having shifted. To sail through the channel, as it is now, take an old Castle, which stands two or three miles up the country, bearing S. W. by S. and keep it in sight right through the mouth of the harbour.

## RUSH Harbour.

In this harbour, there are only nine or ten feet water at high-water spring-tide, and seven or eight at high-water neap-tide; it is therefore fit for small vessels only. On the N. side the harbour is sheltered by a ledge of rocks, which are covered with spring-tide only, and extends from the shore almost parallel to the quay, and within the distance of half a cable from it.

## SKERRIES Harbour.

The harbour of *Skerries* lies on the north side of the Point, and is sheltered on the N. E. side by a ledge of rocks, and a strong quay: the ledge extends northward, from the high-water mark of the extremity of the Point, about a cable's-length, and must have a suitable birth in sailing in or out. Within the quay-head, there is  $10\frac{1}{2}$ , or eleven feet water, at high-water spring-tide, and eight and a half with neap-tide. A cable's-length westward of the quay-head, a vessel may stop on three fathoms water, till the tide makes for going close to the quay.

Convenient to run to in blowing weather.

As this harbour is easily distinguished by *Rockabill*, and *St. Patrick's Isle*, and no difficulty in going in, vessels on this coast may find it a convenient shelter to run to in blowing weather; especially as they may ride under some shelter in the road, if the tide is not made for going in.

## A Description of the Tides, Rocks, Shoals, Channels, Anchoring-Places, and Harbours, between the SKERRIES and St. JOHN'S POINT.

## CHART XXV.

## TIDES.

## Tides between the SKERRIES and St. JOHN'S POINT.

Time of high-water.

On the shores between the *Skerries* and *Drogheda*, it is high-water on the full and change-days at  $10\frac{1}{2}$ ; between *Drogheda* and *Carlingford* at eleven; from *Carlingford* to *St. John's Point* at  $10\frac{1}{2}$ .

Rise of the tide.

On the coast from *Skerries* to *Dundalk*, ordinary spring-tides rise eleven feet perpendicular; neap-tides six or seven: within the harbours of *Dundalk* and *Carlingford*, spring-tides rise eighteen feet perpendicular; neap-tides twelve.

Direction of the stream.

Flood-tide, along this coast, comes from the southward, and near *St. John's Point*, meeting with another stream of flood, setting southward, which comes along the N. coast of *Ireland*, the opposite streams diminish each other's velocity; and, in blowing weather, make a rough sea a little southward of *St. John's Point*; and by accumulating the water in that neighbourhood, occasion a greater rise of the tide there than in other parts.

Velocity of the stream.

The stream of tide between the *Skerries* and *Dundrum Bay* is scarce sensible, except in some narrow channels.

Rockabill.

*Rockabill* is a remarkable rock, always above water, with deep water near it all around. It lies four miles E.

ROCKS and SHOALS.

$\frac{1}{2}$  S. of the *Skerries*.

Kergy Rocks.

*Kergy Rocks* are two small rocks, which lie about two cables-length E. of *New-baven Point*, and dry about half ebb.

Dunany Rock.

Off *Dunany Point* there is a small rock that lies about half a mile eastward of the high-water mark, and dries with spring-tide only.

Shoal in Dundalk Bay.

A small rocky shoal is said to lie in *Dundalk Bay*, about two-thirds from *Dunany*, on the S. side of the Bay, and one-third from *Templeton*, near *Carlingford*. Weeds are said to have been seen growing on it, with a very low spring-tide; and therefore but four or five feet water on it at that time. This rock was searched for with a pilot, but could not be found.

Hellyhunter Shoal

*Hellyhunter* is a rocky shoal, near *Loch Carlingford*, about a mile long from S. W. to N. E. The west extremity of it dries with extraordinary low tides. The least water on other parts is six feet. At the S. W. end of it, the *Mount of Culy* (a regular green hillock, on the Point next west of *Ballaggan Point*) W.  $\frac{1}{2}$  S.; the *Blockhouse* N. W. by W. and on the *Saddle*, at the S. side of *Foy Mountain*; the *House of Cranfield* N. N. W. and on the highest part of *Kiloon Mountain*. To avoid *Hellyhunter*, sailing into *Loch Carlingford* from the E. or S. keep the *Mount of Culy* W. till the *Blockhouse* bears N. W. and on the top of *Foy Mountain*; then steer for the N. end of the *Blockhouse Island*, giving the *Point of Cranfield* and the Island each a birth of a cable's-length from the high-water mark.

Cow-and-Calf Rocks.

The *Cow-and-Calf* are two rocks in the bay of *Dundrum*, near the E. end of the *Sandy Hillocks*, which are not quite covered till about high-water with spring-tide. Half between these and the shore, there is a small rock that dries about half ebb.

Stopping-



From the SKERRIES to St. JOHN'S POINT.

Stopping-Places between the SKERRIES and St. JOHN'S POINT.

STOPPING-PLACES.

Between the *Skerries*, and the Bay of *Dundalk*, the ground is all clean and good, little stream of tide, and the depth moderate; so that ships may stop any where along this part of the coast, when it does not blow hard on shore, from one mile to six miles from the land.

Between Skerries and Dundalk.

From *Dundalk Bay*, to *St. John's Point*, there are no places where it is prudent to stop, except for a few hours, and in very moderate weather, in order to wait the tide for going into a harbour: for which purpose the Bay of *Dundrum* may be convenient in the summer-time. The ground there is clean for the most part, and the depth moderate: but when it blows fresh from the west, violent and sudden gusts of wind come from the *Mountains of Morne*; and S. and S. E. winds set a great sea into it, which makes it difficult turning out of that Bay; so that vessels should seldom stop here, and only with N. or N. E. winds.

Between Dundalk and St. John's Point.  
Dundrum Bay.

Harbours between SKERRIES and St. JOHN'S POINT.

HARBOURS.

BALBRIGGAN Harbour.

*Balbriggan* is a harbour about three miles northward of the *Skerries*; it faces the E. but is sheltered from the easterly winds by a kay on the S. side of the Bay, extending northward. At high-water spring-tide, there is twelve feet water within the kay-head, and nine or ten with neap-tide. There are rocks without the Bay, on each side of this harbour, that dry before low-water; but there is sufficient room between them and the entry, to sail in or out without danger. To avoid these rocks, keep the kay-head between the W. S. W. and the W. N. W. As there is a foot or two more water in this harbour than in the *Skerries*, and a more direct course into it, in hard gales of E. or S. E. winds, vessels may find *Balbriggan* a more convenient place to run for than the *Skerries*.

DROGHEDA Harbour.

The harbour of *Drogheda*, in the *River Boyne*, is fit for small vessels only; such as draw not above nine or ten feet water. On the Bar there is but one foot at low spring-tide; twelve at high-water; and nine or ten at high-water neap-tide. The channel is winding, but sufficiently pointed out by perches. There is a conspicuous land-mark, called *Maiden Tower*, which shews, at several miles distance, where the mouth of the river is. Formerly, vessels used to lie on the N. side of the river, abreast of the houses of *Brochan*: of late the channel there has been altered by piles, and made to run along the S. side, close along the Point at the *New Kay*, and there vessels must lie now.

To sail into *Drogheda* harbour: take the last quarter of flood; keep the *Maiden Tower* E. S. E.  $\frac{1}{2}$  S. till you are near the outer, or bar, perch; take it on the larboard-hand two ships-length; and keep the Obelisk, or little Land-mark, open to the E. a sail's-breadth of the *Maiden Tower*: keep that opening till you are about half a cable from the next perch: take it and the other on the starboard-hand, a ship's-length or two; then steer between the Point and the Piles for the anchorage.

To sail into Drogheda.

DUNDALK Harbour.

In the harbour of *Dundalk*, there is good shelter, and water sufficient for large merchant-ships to go in about high-water, with neap-tide. The channel is perched all along on the W. side. The common place, where the shipping lies, is at *Soldier's Point*, where there is twelve feet at high-water with neap-tide, and sixteen or eighteen at high-water spring-tide.

To fall in with the perches, at the mouth of the channel; keep *Dunany Point* S. by W. or on *Clochar Head*, till the top of *Foy Mountain* bears N. E. when the two first perches will be seen, one on each side of the channel, standing E. and W. of each other: enter between them, but nearest the westmost; and sail up, keeping the perches on the larboard-hand, about two ships-length; but the *Black Rock Perch* must be taken on the starboard-hand, one ship's-length. Small vessels may go up to the kay of *Dundalk*, about high-water neap-tide; but large vessels must have spring-tide.

To make the entry, and sail up the channel.

LOCH CARLINGFORD.

The Bay, or *Loch* of *Carlingford*, is large, well-sheltered, good ground, and has water sufficient for the largest ships: but there are several rocks and shoals that must be carefully attended to, when great ships are brought into this harbour. These are

*Hellybunter* (described above) is avoided by keeping the *Blockhouse* on the top of *Foy Mountain*.

Rocks and Shoals in Loch Carlingford.  
Cranfield Shoal.

*Cranfield Shoal* is a ridge of sand extending westward from the *Point of Cranfield*, about half a mile, on which the least water is eight feet. A ship that draws twelve feet, may sail over this Shoal at two hours flood.

A rocky ledge extends a quarter of a mile S. and S. W. from *Blockhouse Island*; on the E. side of which there is a buoy placed, for keeping clear of this ledge. Between the W. side of *Blockhouse Island*, and the shore of *Balaggan*, is all rocks and shoals, not to be attempted at all.

Blockhouse Ledge.

Half between *Cranfield Point* and *Greencastle*, there is a spit of sand extending southward a quarter of a mile, which dries with spring-tide only.

Spit of sand S. from Greencastle.

There are small rocks between the *Little Green Island* and *Greencastle Point*, which dry before low-water.

Green Island Rocks.

*Stalcock Rock* lies N. W. from *Greencastle*, about three quarters of a mile, and dries with spring-tide only.

Stalcock Rock.

S. from *Stalcock*, and N. N. W. from *Green Island*, there is a small rock which dries with spring-tide only.

Rock N. N. W. of Green Island.

The W. side of the harbour, northward from *Greenore Point*, all along is shallow, half a mile from the shore, and dries before low-water, as far up as *Carlingford*.

W. side shallow.

On the E. side, there is a narrow ridge of sand that extends from the *Point of Kiloan* southward, above a mile; this ridge dries with spring-tide only.

Sand-bank on the E. side S. from Kiloan.

To sail into *Loch Carlingford*, and avoid all these rocks and shoals: take flood-tide, and the *Blockhouse* bearing N. N. W. or N. W. and sail for the E. side of the Island, and give it a birth of a cable's-length, or two, on the larboard hand; from thence steer for *Greenore Point*, and keep between half a cable and two cables-length from it; then steer N. by W. up the middle of the harbour: a-breast of *Kiloan*, or above it, nearest the E. side, come to an anchor on from two to six fathoms water.

To sail into Loch Carlingford.

Small vessels may lie on the W. side easy and safe, on soft mud, about two cables-length eastward of the castle of *Carlingford*.

At Carlingford.

The



## From St. JOHN'S POINT to GLENARM.

Stream in the mouth of  
Loch Carlingford.  
Kiloon anchorage  
squally.

The stream of tide in the entry of this harbour, runs about two miles an hour when strongest. In the winter-time the anchorage, near *Kiloon*, is subject to hard squalls of wind from the mountains.

## DUNDRUM Harbour.

This harbour is seldom to be attempted; for the Bar with S. and S. E. winds that are most favourable for going in, has a very rough and breaking sea on it. The Bar is dry with low spring-tide only; and the channel, up to the harbour, dries one hour before low-water. At high-water spring-tide, there are sixteen or eighteen feet water on the Bar, and fifteen in the channel; with neap-tides ten or twelve.

To sail into Dundrum.

If a vessel is under the necessity of going into this harbour, the Bar will be fallen in with, by keeping St. *John's Point* E. S. E. till the castle of *Dundrum* (which stands on a hill) bears N.  $\frac{1}{2}$  W. and about two ships-length on the *Point of Murlach*; when the *Point of Murlach*, and the opposite Point are open three or four ships-length, then steer N. over the Bar, and right up between the two Points.

*A Description of the Tides, Rocks, Shoals, Channels, Anchoring-Places, and Harbours, between St. JOHN'S POINT and GLENARM.*

## C H A R T XXVI.

## TIDES.

## Tides between St. JOHN'S POINT and GLENARM.

Time of high-water.

It is high-water, on the full and change days of the moon, at St. *John's Point*, at 10 $\frac{1}{2}$ ; at *Copland Isles*, at ten; at *Glenarm*, at ten; in the harbour of *Donnacbadee*, at eleven; but the stream between that and *Copland Island* turns N. two hours sooner; at the quay of *Belfast*, at 10 $\frac{1}{2}$ .

Rise of the tide.

Spring-tides, from St. *John's Point* to *Glenarm*, rise eleven or twelve feet perpendicular; neap-tides six or seven.

Direction of the stream.

The stream of flood, along this part of the coast, comes from the north; and ebb from the south.

Velocity of the stream.

From St. *John's Point* to *Gun's Island*, the stream of tide, when strongest, runs not above half a mile an hour along the shore: in the entry of *Loch Strangford*, it is judged to run ten miles an hour when strongest: near the north and south rocks 3 $\frac{1}{2}$  miles; in the sound between *Donnacbadee* and *Copland*, four miles: on the E. side of *Ma Island*, next the light-house, four miles: and near *Muck Island*, at the N. end of *Island Magee*, four miles an hour when strongest.

## ROCKS and SHOALS.

## Rocks and Shoals along the Coast from St. JOHN'S POINT to GLENARM.

Rock Patrick.

*Rock Patrick* lies near half a mile S. E. from *Kilard Point*, at the mouth of *Strangford*, and dries at half ebb.

Rocks and a shoal near South Rock.

The *South Rock* lies about two miles E. by N. of the *Kerry Point*; is about a cable's-length long from the N. to the S. and is quite covered only at high-water spring-tide. At this Rock, the *North Rock* bears on *Bur Island*; *Kirkeston Castle* N. by W.; *Mount Ross House* W. N. W.; and *Newcastle*, (now ruinous) N. W. by W.  $\frac{1}{2}$  W. About a quarter of a mile N. E. from the *South Rock*, there is a small rock that dries about half ebb;

Pladdins Shoal

and another rock E. N. E. from it about half a mile, which dries at four hours ebb: at this rock a shoal begins, which extends about half a mile from it E. S. E. called the *Pladdins*; the least water found on it, at low spring-tide, was two fathoms. The E. end of it is about a mile E. by S. from the *South Rock*; and there *Bur Island* bears N.  $\frac{1}{2}$  E. Keep *Bur Island* N. or westward of north, and you avoid this shoal, and all the other rocks and shoals in this neighbourhood.

North Rock.

The *North Rock* lies about two miles S. E. from the *Point of Kerkeston*; the middle of it is never quite covered, except with very extraordinary high tides. About a quarter of a mile E. of the *North Rock*, there are two small rocks that dry at half ebb; and two above a quarter of a mile W. of it; and between it and *Kerkeston* the water is all shallow. The *North Rock*, and the rocks and shoals near it, are avoided on the E. side, as the *South Rock* is, by keeping *Bur Island* N.

Rocks between Green Island and Bur Island.

Between *Green Island* and *Bur Island*, there are several rocks that dry about half ebb, or near low-water; the outermost of which are near half a mile from the shore.

Rocks near Bur Island.

Above a cable's-length eastward of *Bur Island*, there are several rocks that dry about half tide.

Sculmartin Rock.

*Sculmartin Rock* lies about a mile S. E. from the town of *Balliwalter*, and dries at half ebb.

Balliwalter Long Rock

*Balliwalter Long rock* lies along the land, near *Ballifry's Point*, reaching about half a mile from the shore, and extending southward from the Point two miles. Near the S. end it is covered at high-water only, but not with dead neaps; the middle is covered about half flood; the N. end is covered only with extraordinary spring-tides. To avoid these two last-mentioned Rocks, keep *Copland Light-house* westward of N. or keep the *Black Head of Island Magee* eastward of the Wind-mill of *Donnacbadee*.

Deputy Rock

*Deputy Rock* is a shoal in the Sound of *Copland*, near half way between the S. end of that Island and *Donnacbadee*: the least water on it is eight feet. Leading marks to it, are *Catikern Rock*, on, or a little S. of the highest ground next N. of the *Old Light-house*, which stands on *Island Magee*; also *Kilroot House* (near *Carrickfergus*) a ship's-length in by *Nout-head Point*. To avoid this shoal on the W. side, keep nearer to the *Donnacbadee* side than to the *Copland* side; or keep *Catikern Rock* eastward of the highest ground that is next north of the *Old Light-house*: to avoid it on the E. side, keep one-third from *Copland Isle*, and two-thirds from the main; or keep *Kilroot House* out by *Nout-head Point*; or keep the *Rock of Catikern* on, or a little N. of the *Old Light House* of *Island Magee*.

Catikern Rocks.

*Catikern Rock* lies near *Catikern Point* in *Copland Island*, and is always above water: about a cable's-length southward from that Rock, there is another rock, which dries at low-water only, with a shoal extending from it half a cable's-length southward.

Ledges on the E. side of Copland Island.

On the E. side of *Copland Island*, near the S. end, there are two ledges, which extend eastward, near two cables-length.

Pladdins Rock between Copland Island, and Crofs Island.

Half between the S. end of *Copland Island* and *Crofs Island*, where the light-house is, there is a small rock which dries with extraordinary low spring-tide only, called the *Pladdins*; with ordinary spring-tides there are three



## •From St. JOHN'S POINT to GLENARM.

three or four feet on it. It bears S. from the light-house. To sail along the E. side of this rock, keep the light-house N. by W. To avoid it on the S. side, keep the north-westmost house of *Donnacbadee* in sight, by the S. end of *Copland Isle*.

About a cable's-length S. from the W. end of *Ma Island*, there is a blind rock, on which the least water is Shoal near Ma Island. three or four feet. At half-tide there are seven or eight feet over it.

The *Brigs* is a ledge which extends above a quarter of a mile northward from *Balue Point*, next *Nout-head* Brigs Ledge.

*Hunter's Rock* is a small shoal, about two miles N. from *Island Muck*; the least water on it is six or seven feet. At this Rock the Sound of *Island Muck* is quite open, *Ballygally Head* bears N. W. and the highest of the *Hulin Rocks* N. E.: a leading mark to it is the *Castle of Corran*, at the mouth of *Lochlarne*, a boat's-length in by the opposite point of *Island Magee*: also the middle of *Ballygally Head*, on the top of the *Scarwd Hill*.

The *Hulins*, or *Hollans*, are two remarkable rocks, always above water, that lie five or six miles N. E. from *Lochlarne*, S.  $\frac{1}{2}$  W. from the *Mule of Cantire*, N.  $\frac{1}{2}$  W. from *Copland Light-house*, and E.  $\frac{1}{2}$  S. from *Ballygally Head*. About half a mile S. S. W. from the highest, or southmost, *Hulin Rock*, there is a rock covered only with high-water; and another rock half a cable's-length southward of it, which is never quite covered; and a rock half way between these two, which is covered at half-flood. On the N. side of the *Hulins*, there are three small rocks, about a mile and a half distant, that dry about half ebb: the eastmost of these three bears from the highest *Hulin* N. by E. and the westmost bears about N. N. W. To avoid the *Hulins*, and the rocks near them on the E. side, keep the *Mule of Cantire* N. or westward of N. or keep *Copland Light-house* S. or westward of S. To avoid them along the W. side, keep the lowest, or westmost, of the two *Hulins* open to the E. of *Island Magee*: or keep within a league and a half of the coast of *Ireland*.

## Stopping-Places.

## STOPPING-PLACES.

On the coast between *St. John's Point* and *Glenarm*, there are very few places, without the harbours, where it would be convenient for any vessels to stop, even in moderate weather: in most parts, the ground is either foul, or the stream of tide strong.

In moderate weather, or with the wind off shore, a ship may stop about a mile northward of *Bur Island* on six or eight fathoms water, clean ground, and in little tide-way. Or off the harbour of *Dunnacbadee*, on four or five fathoms. Or off the *Bay of Bangor*, in the mouth of *Belfast Loch*, on five or six fathoms. Or southward of *Island-muck*, about two cables-length from the shore of *Island Magee*, on nine or ten fathoms.

## Harbours from St. JOHN'S POINT to GLENARM.

## KILLOCH Harbour.

## HARBOURS.

*Killoch* is a dry harbour, fit for small vessels only: there are nine or ten feet water in it at high-water with spring-tide, and six or seven at high-water neap-tide. The best part to lie in, is a little northward of the W. point of the Peninsula, called *Coney Island*, opposite to the town of *Killoch*, where there is a foot, or two, more water than at the kay of *Killoch*. On the W. point of *Coney Island*, there is a perch placed: in passing it, keep two or three ships-length from the perch.

In the mouth of *Killoch Bay*, nearest the W. side, there is a rock, called *Water Rock*, which is covered at high-water, with spring-tide only. To avoid it on the E. side, keep *Gaze-Abby* out by the kay-head, at the town of *Killoch*. *Gaze Abby* may be seen like a low tower, three or four miles N. of *Killoch*.

About half between *Water Rock*, and *Coney Island*, there is a small rock, which dries with spring-tide only; and another about half between the last rock and the entry into the harbour, which dries with spring-tide only; it lies about a cable's-length S. by W. from the S. end of *Coney Island*. On the W. side of the Bay, over-against the last-mentioned Rock, there is a rocky ledge, called *Ring-fallock*, which extends about a cable's-length from the shore, and must be avoided going in, or out of, this harbour: it lies a little northward of the Windmill, and dries gradually from high-water to low. This ledge is avoided, by keeping the *Cotter's House* open with the kay-head. The *Cotter's House* is a small house standing by itself on the shore, at the head of the Bay.

## ARDGLASS Bay.

This is a small creek where, in moderate weather, or the wind off shore, a vessel may stop at anchor, when tide, or day-light, does not serve for sailing to other harbours, or for passing the *South-and-North-Rocks*. This creek is easily known, by several old castles standing together on the W. side of the Bay. Anchor in the mouth of the creek, on three or four fathoms water. If the wind is on shore, a small vessel may shelter on the W. side of this Bay, below the middlemost castle, on  $1\frac{1}{2}$  fathom at low-water, by making fast to a rock on each side of the sandy-beach there. In a case of necessity, a vessel may run a-ground on this sandy-beach, and lie sheltered from all winds and sea.

## LOCH STRANGFORD.

Within this harbour there is good shelter, a sufficient depth of water for any ship, and good ground: but the stream of tide, in the mouth of it, is so excessively rapid, and the sea breaks so violently on the shoal, called the *Bar*, at all times, except about slack-water, that no vessel ought to attempt to sail into this place, without a favourable wind and tide: and then great caution should be used to avoid being carried by the stream, either on *Rock Angus* on one hand, or on *Pladdylug* on the other.

In the mouth of *Loch Strangford*, it is high-water, full and change-days, on the shore, and on the shoals, at  $10\frac{1}{2}$ ; but the stream, in the middle of the channel, runs in above an hour longer; and the stream of ebb runs out above an hour after it is low-water on the shore and shoals.

Spring-tides, when strongest in the entry to this harbour, are judged to run about ten miles an hour; but it is seldom its greatest celerity can be measured precisely.

*Rock Patrick* lies S. E. from *Kilard Point*, about half a mile, and dries at half ebb.

The *Bar of Strangford* is a rocky shoal, which lies in the middle of the mouth of *Strangford* between *Kilard Point* and *Balliquinten Point*: it is above a quarter of a mile long, from N. E. to S. W. the least water on it is nine feet; twelve feet is the least at low-water, with neap-tide. On this shoal there is always a breaking sea, except about

Rocks in Strangford.  
Rock Patrick.  
The Bar.



## From St. JOHN'S POINT to GLENARM.

about one hour and a half before and after slack-water. The stream of flood over it, does not run right in through the channel, but tends a little westward toward *Rock Angus*: this should be attended to, and allowed for, in sailing in with little wind.

*Rock Angus.*

*Rock Angus* lies about half a mile northward of the Bar, near the middle: it is above a quarter of a mile long from N. to S. A small part of it, near the N. end, is always above water, except at high-water, with extraordinary spring-tide: the S. end is called the *Garter*, and dries not till near half ebb. The common channel into *Strangford*, and the safest, is on the E. side of *Rock Angus*; but a vessel that draws twelve feet water may fail in on the W. side of it at a quarter flood, by keeping the middle, between it and the shore, or by keeping the *Castle of Kilief* on the top of *Clochy Hill*. *Clochy Hill* is the northmost, and most tapering Hill that lies about two miles north-westward of *Kilief Castle*; it is cultivated to the top, where a few trees may be seen on each side.

*Pladdy-lug Rock.*

*Pladdy-lug Rock* extends southward from the *Bay of Barball*, near half a mile: the north part of it dries with spring-tide only: the south part is always below water; and has but about five feet over it at low spring-tide.

Avoided sailing in.

The best time of the tide to sail past *Pladdy-lug*, or to go into *Strangford*, is either with the first, or the last hour of the flood; if you are to sail in with the first of the flood, avoid *Pladdy-lug*, by keeping the trees on *Strangford Point* a sail's-breadth open of the *Laird's Point*. If you sail in about high-water, keep the middle between *Balliquinten Point* and *Rock Angus*.

To sail through the Narrow.

In sailing through the *Narrow*, above *Rock Angus*; keep near mid-channel, to avoid the rocks in the *Bay of Bankmore*, and on the opposite side, which dry at low-water: or keep the *Point of Strangford* on the westmost of the houses of *Balliberry*.

Stopping-places in the Narrow of Strangford. Clochy Bay.

There are some places in the *Narrow* (commonly called the *River*), where vessels may stop on clean ground, and out of the stream of tide. These are *Clochy Bay*, on the W. side, about two cables-length from the shore, on four fathoms, keeping clear of the ledges that extend from the S. side of the Bay. In the mouth of the creek on the S. side of *Audley's Castle*, a ship may stop on good ground, on four fathoms water, and out of the stream. In *Ballyhenry Bay*, a vessel may ride pretty safe in moderate weather, out of the stream of tide: anchor off the middle of the Bay, about a cable's-length and a half from the high-water mark, on seven or eight fathoms.

Audley's Castle. Balliberry Bay.

Chappel Island.

Ships that intend to continue any time in *Strangford*, should pass the *Narrow* a little toward the westward, and anchor N. W. from *Chappel Island*, on from four to seven fathoms water; or N. E. from *Salt Island*, on six or seven fathoms. Farther up *Loch Strangford*, there is good anchorage for fleets of the largest ships.

## DONNACHADEE Harbour.

In *Donnachadee* harbour small vessels may lie a-ground within the kay, where there is ten or eleven feet at high-water spring-tide, and eight or nine at high-water neap-tide. In coming toward this harbour, from the N. at low-water, avoid *Deputy Rock*, before described, on which eight feet is the least water.

Rocks near Donnachadee harbour. Rock N. from the kay.

Northward from the end of the kay, about a quarter of a cable's-length, there is a rock which dries two hours before low-water.

Rock E. from the kay.

On the E. side of the kay, near the shore, there is a rock covered only with high spring-tide: about half a cable eastward, and north-eastward of this rock, it is dry about low-water.

To sail into Donnachadee from the S.

To sail into *Donnachadee* harbour from the S. keep at least half a cable's-length from what is seen on the east side of the kay, until the kay-head bears on a small white house, with a thatched roof, near the middle of the shore (this house has the door in the middle, and four windows in it); when this little house is on, or just out by the kay-head, steer right for it, till the harbour is open, then steer right in, keeping a ship's-length, or two, from the kay-head.

To sail in from the N.

To sail into *Donnachadee*, from the N. avoid a ledge, which extends about a cable's-length from *Foreland Point*, by keeping the Meeting-house in sight by the eastmost house at the kay (the Meeting-house is the southmost house in the town, and stands a little E. of the Wind-mill); then steer a little eastward of the kay, till you take the forementioned little thatched house and the kay-head in a line, then steer right for the kay-head, and give it a birth of a ship's-length or two.

## BELFAST LOCH.

*Belfast Loch* is a large Bay, pretty well sheltered, of easy access, the depth sufficient for any ships, and the anchor-hold good. *Copland Light*, on *Crofs Island*, will direct ships into it in the night-time. The usual, and most convenient anchorage for large ships, is off the town of *Carrikfergus*, near the middle of the Bay, and two or three miles westward of that, on from four to six fathoms water. Small vessels may go as far up as the *Three-mile-water*, and anchor about a mile from the shore, on  $2\frac{1}{2}$  fathoms water: or such as intend to go up to *Belfast Kay*, may stop in *Carmoyl* on two, three, or four fathoms.

*Carrikfergus Bank.*

*Carrikfergus Bank* lies a little westward of the town of *Carrikfergus*, and about a mile from the shore; and extends westward about half a mile; the least water on it is eight feet; which is on a small part near the S. edge of the Bank; on the rest there are twelve feet. Leading marks to the shallowest part are, the *Castle of Carrikfergus*, bearing N. E. by N.; the *Point of Kilroot*, a boat's-length out by *White-head*; and the Customhouse of *Carrikfergus*, a good deal open of *Kay-head*. To avoid *Carrikfergus Bank*, along the E. end; keep the *Castle N.* or bearing on the high road, which may be perceived going northward from the town: to avoid it along the S. side, keep *White-head* a little out by the *Point of Kilroot*.

Avoided.

*Holywood Bank* is a tongue of sand, which extends about a mile north-westward from the village of *Holywood*, the greatest part of which is dry at low spring-tide. It is avoided in sailing to *Carmoyl*, by keeping the middle, or nearest to the N. side.

To sail into Carmoyl Road.

To sail into *Carmoyl* anchorage: about half-flood, take *White-house* on the S. end of *Carmony Hill*; or *Belmount House* open a sail's-breadth to the E. of a bush of wood, which is a little northward of *Ballimechan*; keep either of these marks on till *Carmoyl Buoy* bears on the town of *Belfast*, then steer S. W. till that Buoy bears on *Cove Hill*, or between *Cove Hill* and the *Black Hills* of *Belfast*, and there drop anchor.

Channel to Belfast.

The channel from *Carmoyl* to *Belfast* is crooked, and almost dry at low-water spring-tide. A vessel that draws eight feet, must have spring-tide to go up to the kay. There are several perches, and a buoy, placed along the side of the channel, all which must be taken on the starboard-hand, about a ship's-length. Close to the kay, ordinary spring-tides rise  $7\frac{1}{2}$  feet, and neap-tides four or five.

Within



## From LARN to RACHLIN ISLAND.

Within the kay of *Carrikfergus* harbour, there are  $7\frac{1}{2}$  feet at high-water spring-tide, and five with neap-tide. *Carrikfergus* harbour.  
In *Bangor* harbour, on the S. side of the kay-head, there are eight or nine feet water, at high-water spring-tide, and six feet with neap-tide. *Bangor* harbour.

## LOCH LARN.

*Loch Larn* is a small, but safe harbour, where vessels that draw not above ten feet water may ride on clean good-holding ground.

To sail into *Larn*, avoid the *Hunter's Rock* before described; and keep near the middle of the channel going in, if it is about low-water; for half a cable from the shore of the *Island Magee* side, there is only six feet at low spring-tide: anchor about one-third from *Corran*, and two-thirds from *Island Magee*, when the old castle of *Corran* bears W. or S. W. and the highest *Hulin Rock* a boat's-length open of the Point of *Island Magee*, on two fathoms at low-water. Moor N. and S. partly on account of the tide, which here runs about two miles an hour when strongest; but chiefly that, if it blows hard from the W. or E. you may be able to spare off cable, without riding too near either shore.

A vessel that is to continue any time in this harbour, may ride better sheltered from wind and tide, by going half a mile farther up, and making fast to *Yellow Rock* in *Island Magee*, where she may ride on  $2\frac{1}{2}$  fathoms, and quite land-locked. The *Yellow Rock* is a large stone on the shore of *Island Magee*, covered with yellowish moss. In sailing up to this anchorage, take half-flood or more, so as to have water over *Middle Bank*, which lies S. E. from the *Old Castle*, and somewhat nearer the Point of *Corran* than to *Island Magee*. The least water on it is six feet.

## A Description of the Tides, Rocks, Shoals, and Anchoring-Places, from LARN to RACHLIN ISLAND.

## CHART XXVIII.

## Tides between LOCH LARN and RACHLIN ISLAND.

## TIDES.

On the shores between *Loch Larn*, and the Point of *Tor*, it is high-water on the full and change-days at ten o'clock: on the shore of *Ballicastle*, at  $5\frac{1}{2}$ ; on the shore of *Rachlin*, about eight; in the Sound of *Rachlin*, the stream of ebb, or westward stream, does not begin till  $9\frac{1}{2}$ ; on full and change-days; at the Point of *Tor*, at ten; on *Skerinoe Race*, at eleven, by the stream.

Ordinary spring-tides, from *Larn* to the Point of *Tor*, rise nine or ten feet perpendicular; neap-tides four or five: at *Ballicastle*, and at *Rachlin Island* spring-tides rise  $3\frac{1}{2}$  feet perpendicular, and neap-tides  $1\frac{1}{2}$ .

The stream of flood near *Rachlin*, sets in from the N. W. and off *Knockinterrie Head*, divides into two branches; one of which runs along the N. side of the Island, the other along the S. side, through the Sound of *Rachlin*, to the Point of *Tor*; and passing that Point, at first it runs S. S. E. keeping within a mile of the coast; but as the flood makes, the stream wears gradually more eastward from the shore, till at half-flood it runs in the direction of the *Mule of Galway* in Scotland. The stream of ebb takes a contrary direction; the first of it comes from the S. S. E. passes the Point of *Tor*, and runs westward toward the Sound of *Rachlin*; but after two hours of ebb, the stream divides off *Fair Head*, about two miles from the shore, into two branches, one of which runs through the Sound of *Rachlin*; the other runs northwestward toward the N. E. end of the Island.

Between *Larn* and the Point of *Tor*, spring-tides, when strongest, run not above two miles an hour; near the Point of *Tor*, they run six miles an hour; in the Sound of *Rachlin*, about  $2\frac{1}{2}$ ; in the Bay of *Ballicastle*, two; but neap-tides are scarce sensible in it.

There are no rocks nor shoals between *Larn* and *Rachlin Island* but *Hunter's Rock* and the *Hulin Rocks*, which were described in the last chart.

*Skerinoe* is a race of tide, and over-fall four miles N. E. by E. of *Bruce's Castle* in *Rachlin*, which rages and breaks much when the wind and tide are contrary. The least water found on it was thirty-one fathoms; but there are said to be but sixteen on one part of it. It is for the most part rocks, extending from S. E. to N. W. above a mile. This over-fall may be perceived in the calmest weather, by a ripple.

## Stopping-Places and Harbours between LARN and RACHLIN ISLAND.

## STOPPING-PLACES and HARBOURS.

In *Glenarm Bay* a ship may stop, in moderate weather, on five or six fathoms water, and good anchor-hold, a little eastward of the middle, and about a quarter of a mile from the shore.

Also in the Bay next *Glenarm*, between *Glencloy* and *Carnloch*, on six or eight fathoms, clean ground.

In moderate weather a ship may stop in any part of *Red Bay*, or in *Cushindaal Bay*, above two cables-length from the shore, on from three to nine fathoms water.

The Bay of *Cushindin* is pretty good anchorage when the wind does not blow on shore. Anchor on the N. side of the Bay, two cables-length from the shore, and a quarter of a mile northward of the sandy shore, on six or seven fathoms water.

In *Church Bay*, in the *Island Rachlin*, the ground is clean; and when a vessel is as far in as to ride on eight or nine fathoms, for the most part holds well; but with westerly winds there sets a great swell of sea into it, which makes it very hard riding in this Bay at such times. The best place to anchor in, is nearest the north side of the Bay, when the church bears E. N. E. and the southmost point of the Island S.  $\frac{1}{2}$  E. There *Fair Head* is quite shut in; and a small turret, on a hill about a mile N. of the Minister's House, is fairly in sight to the eastward of another hill near it. There are two turrets on hills, one N. E. the other E. of the Minister's House, which may be mistaken for that first-mentioned, if their position, with respect to that house, is not attended to.

In moderate weather, and westerly wind, a vessel may stop on the E. side of *Rachlin*, on twelve or thirteen fathoms, gravel ground, near *Dune Point*, either on the S. or N. side of it, and about half a mile from the shore. There is a large eddy formed there with flood, which extends about two miles south-eastward, and a small one with ebb tide, within which there is very little stream. In winter no ship should stop here all night.

BALDICASTLE



## THE EAST COAST OF IRELAND.

### FROM LARN TO RACHELIN ISLAND.

#### BALLICASTLE Harbour.

This harbour is made at the mouth of a small rivulet, near the town of Ballicastle; and if the piers are kept in good condition, and the basin emptied when it happens to fill with sand (as it has sometimes done in a night's time), may afford shelter in the winter-time to small vessels that draw not above seven feet water; for at high-water, with spring-tide, there are nine or ten feet between the pier heads; and eight feet with neap-tide. This harbour is necessary here, on account of a coal-pit close by it, where vessels are often loaded in the summer-time; and might be so in winter, if the harbour was always kept clear of sand.

In the summer-time, ships may ride in the Bay of Ballicastle, near the W. side, on nine or ten fathoms water, the ground bearing S. by W. Ship Island shut in by Keshmarr Head, and Clare Head bearing on the top of the hill behind. Near this anchorage there are stones, or small patches of foul ground, by which some vessels have been disabled; and therefore it is not prudent to be long here: but if the wind begins to blow from the N. or N.W. and a swell to set in, it is then proper to weigh anchor, and sail round Tor Point for Carrigrohane Bay, or for Larn.

The stream of tide in Ballicastle Bay runs nine hours eastward, and three hours westward; but subject to some variation from the winds. It begins to turn westward two hours before the stream out off in the channel down for. With neap-tide the stream here is scarce perceptible, but seemed to run always eastward.

#### END OF THE DESCRIPTIONS OF IRELAND.



